



South Coast  
Air Quality Management District  
21865 Copley Drive, Diamond Bar, CA 91765-4182  
(909) 396-2000 • <http://www.aqmd.gov>

**SUBJECT: NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL ASSESSMENT**

**PROJECT TITLE: PROPOSED AMENDED RULE 1168 – ADHESIVE AND SEALANT APPLICATIONS**

In accordance with the California Environmental Quality Act (CEQA), the South Coast Air Quality Management District (SCAQMD), as the Lead Agency, has prepared this Notice of Preparation of a Draft Environmental Assessment (NOP) and Initial Study (IS). This NOP and IS serve two purposes: 1) to solicit information on the scope of the environmental analysis for the proposed project, and 2) to notify the public that the SCAQMD will prepare a Draft Environmental Assessment (EA) to further assess potential environmental impacts that may result from implementing the proposed project.

This letter, NOP and the attached IS are not SCAQMD applications or forms requiring a response from you. Their purpose is simply to provide information to you on the above project. If the proposed project has no bearing on you or your organization, no action on your part is necessary.

Comments focusing on your area of expertise, your agency's area of jurisdiction, or issues relative to the environmental analysis should be addressed to Mr. James Koizumi (c/o CEQA) at the address shown above, or sent by FAX to (909) 396-3324 or by e-mail to [jkoizumi@aqmd.gov](mailto:jkoizumi@aqmd.gov). Comments must be received no later than 5:00 PM on Tuesday, January 14, 2014. Please include the name and phone number of the contact person for your agency. Questions regarding the proposed amendments should be directed to Mr. Michael Morris at (909) 396-3282 or by e-mail to [mmorris@aqmd.gov](mailto:mmorris@aqmd.gov). Please include the name and phone number of the contact person for your agency.

A Public Workshop and CEQA Scoping Meeting to solicit public input on the scope of the analysis to be included in the Draft EA is scheduled for December 18, 2013 at 9:00 p.m at SCAQMD Headquarters. The Public Hearing for the proposed amended rule is scheduled for June 6, 2014 at SCAQMD Headquarters. (Note: Public meeting dates are subject to change).

**Date:** December 10, 2013

**Signature:** 

**Title:** Michael Krause  
Program Supervisor

**Telephone:** (909) 396-2706

**Reference: Title 14, California Code of Regulations §§ 15087, 15105, 15161, 15251 and 15375**

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**  
**21865 Copley Drive, Diamond Bar, CA 91765-4182**

**NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL ASSESSMENT**

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**Project Title:**

Proposed Amended Rule 1168 – Adhesive and Sealant Applications

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**Project Location:**

South Coast Air Quality Management District (SCAQMD) area of jurisdiction consisting of the four-county South Coast Air Basin (Orange County and the non-desert portions of Los Angeles, Riverside and San Bernardino counties), and the Riverside County portions of the Salton Sea Air Basin and the Mojave Desert Air Basin

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**Description of Nature, Purpose, and Beneficiaries of Project:**

PAR 1168 would amend volatile organic compound (VOC) content limits for certain adhesives, adhesive applications, sealants and caulks, and sealant primers; establish new categories and VOC content limits; define tertiary butyl acetate and dimethyl carbonate as exempt VOCs from roofing regulated products; expand the applicability of the rule to include some aerosol adhesives and consumer products used in manufacturing operations; remove or limit some existing exemptions; include annual reporting requirements for sales of regulated products; prohibit the use of Group II exempt solvents, except volatile methyl siloxanes, for regulated products; and include additional administrative requirements and corrections to clarify rule language and remove obsolete provisions. Significant adverse air quality and hazards and hazardous materials will be analyzed further in the Draft Environmental Assessment. No other significant adverse impacts were identified in the Initial Study.

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**Lead Agency:**

South Coast Air Quality Management District

**Division:**

Planning, Rule Development and Area Sources

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**The Initial Study and all supporting documentation are available at:**

SCAQMD Headquarters  
21865 Copley Drive  
Diamond Bar, CA 91765

**or by calling:**

(909) 396-2039

**The Initial Study can also be obtained by accessing the SCAQMD's website at:**

<http://www.aqmd.gov/ceqa/aqmd.html>

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**The Public Notice of Preparation is provided through the following:**

Los Angeles Times (December 13, 2013)     SCAQMD Website     SCAQMD Mailing List

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**Initial Study Review Period (33-day):**

December 13, 2013– January 14, 2014

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The proposed project may have statewide, regional or areawide significance; therefore, a CEQA scoping meeting is required (pursuant to Public Resources Code §21083.9 (a)(2)) and will be held on December 18, 2013. See Scheduled Public Meeting Dates below for details.

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**Scheduled Public Meeting Dates (subject to change):**

Public Workshop and CEQA Scoping Meeting: December 18, 2013, 9:00 p.m.; SCAQMD Headquarters  
SCAQMD Governing Board Hearing: June 6, 2014, 9:00 a.m.; SCAQMD Headquarters

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**Send CEQA Comments to:**

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**Phone:**

(909) 396-3234

**Email:**

[jkoizumi@aqmd.gov](mailto:jkoizumi@aqmd.gov)

**Fax:**

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**Direct Questions on Proposed Amend Rules:**

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(909) 396-3282

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[mmorris@aqmd.gov](mailto:mmorris@aqmd.gov)

**Fax:**

(909) 396-3324

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# SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

**Initial Study for:**

**Proposed Amended Rule 1168 – Adhesive and Sealant Applications**

**December 2013**

**SCAQMD No. 131211JK**

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**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
GOVERNING BOARD**

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Mayor, City of Santa Ana  
Cities Representative, Orange County

**EXECUTIVE OFFICER:**  
**BARRY R. WALLERSTEIN, D.Env.**

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## **CHAPTER 1**

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### **PROJECT DESCRIPTION**

**Introduction**

**California Environmental Quality Act**

**Project Location**

**Project Objective**

**Project Background**

**Project Description**

**Alternatives**

## **INTRODUCTION**

The California Legislature created the South Coast Air Quality Management District (SCAQMD) in 1977<sup>1</sup> as the agency responsible for developing and enforcing air pollution control rules and regulations in the South Coast Air Basin (Basin) and portions of the Salton Sea Air Basin and Mojave Desert Air Basin referred to herein as the district. By statute, the SCAQMD is required to adopt an air quality management plan (AQMP) demonstrating compliance with all federal and state ambient air quality standards for the district<sup>2</sup>. Furthermore, the SCAQMD must adopt rules and regulations that carry out the AQMP<sup>3</sup>. The 2012 AQMP concluded that reductions in emissions of particulate matter (PM), oxides of sulfur (SOx), oxides of nitrogen (NOx), and volatile organic compounds (VOC) are necessary to attain the state and national ambient air quality standards for ozone, and particulate matter with an aerodynamic diameter of 2.5 microns or less (PM2.5).

Volatile organic compound (VOC) emissions contribute to ozone formation and U.S. Environmental Protection Agency (EPA) has 8-hour ozone standards that have not been attained yet in the region. Therefore, reducing the quantity of VOC emissions within the jurisdiction of the SCAQMD has been an on-going priority and effort by the SCAQMD. Because materials used in adhesive and sealant operations are considered by SCAQMD as one potential source where VOC emission reductions can be achieved, in April 1989, Rule 1168 – Adhesive and Sealant Applications, was adopted. Rule 1168 applies to both the sale and application of adhesives and sealants. Thus, the responsibility to comply with Rule 1168 is with the person who sells the affected products or who applies the affected product. Since its adoption, Rule 1168 has been amended thirteen times, with the most recent amendments occurring in 2005.

The 2012 AQMP, specifically Control Measure CTS-02 – Further Emission Reduction from Miscellaneous Coatings, Adhesive, Solvents and Lubricants, identifies amendments to various VOC rules, including Rule 1168, to achieve additional VOC reductions. MCS-01 Application of All Feasible Measures Assessment [All Pollutants] requires the adoption of all feasible measures, because the district is an "extreme" nonattainment area for the 8-hour ozone standard. The VOC content limits in PAR 1168 reflect the technology of low-VOC products improved over the past 13 years since the last major reduction in VOC limits from adhesive and sealant applications. PAR 1168 would partially implement CTS-02 and MCS-01.

PAR 1168 would amend volatile organic compound (VOC) content limits for certain adhesives, adhesive applications, sealants and caulks, and sealant primers; establish new categories and VOC content limits; define tertiary butyl acetate and dimethyl carbonate as exempt VOCs from roofing regulated products; expand the applicability of the rule to include some aerosol adhesives and consumer products used in manufacturing operations; remove or limit some existing exemptions; include annual reporting requirements for sales of regulated products; prohibit the use of Group II exempt solvents, except volatile methyl siloxanes, for regulated products; and include additional administrative requirements and corrections to clarify rule language and remove obsolete provisions.

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<sup>1</sup> The Lewis-Presley Air Quality Management Act, 1976 Cal. Stats., ch 324 (codified at Health and Safety Code, §§40400-40540).

<sup>2</sup> Health and Safety Code, §40460 (a).

<sup>3</sup> Health and Safety Code, §40440 (a).

Pursuant to the California Environmental Quality Act (CEQA) (California Public Resources Code §§ 21000 et seq.), a Draft Environmental Assessment (EA) will be prepared to analyze potential adverse environmental impacts from implementing the amendments to Rule 1168. Based upon an initial evaluation in this Notice of Preparation and Initial Study (NOP/IS), the environmental topics of air quality, hazards and hazardous materials, hydrology and water quality, and public services were identified and analyzed as having the potential to be adversely affected.

### **CALIFORNIA ENVIRONMENTAL QUALITY ACT**

Amending Rule 1168 is considered a “project” as defined by CEQA. CEQA requires that the potential adverse environmental impacts of proposed projects be evaluated and that methods to reduce or avoid identified significant adverse environmental impacts of these projects be implemented if feasible. The purpose of the CEQA process is to inform the SCAQMD Governing Board, public agencies, and interested parties of potential adverse environmental impacts that could result from implementing the proposed project and to identify feasible mitigation measures or alternatives, when an impact is significant.

California Public Resources Code §21080.5 allows public agencies with regulatory programs to prepare a plan or other written documents in lieu of an environmental impact report once the Secretary of the Resources Agency has certified the regulatory program. The SCAQMD's regulatory program was certified by the Secretary of Resources Agency on March 1, 1989, and is codified as SCAQMD Rule 110. Pursuant to Rule 110 (the rule which implements the SCAQMD's certified regulatory program), SCAQMD is preparing a Draft EA to evaluate potential adverse impacts from the proposed project.

The SCAQMD, as Lead Agency for the proposed project, has prepared this Initial Study that includes an Environmental Checklist and project description. The Environmental Checklist provides a standard evaluation tool to identify a project's adverse environmental impacts. The Initial Study is also intended to provide information about the proposed project to other public agencies and interested parties prior to the release of the Draft EA. SCAQMD's review of the proposed project shows that PR 4001 may have a significant adverse effect on the environment. Because PR 4001 may have statewide, regional or areawide significance, a CEQA scoping meeting is required to be held for the proposed project pursuant to Public Resources Code §21083.9 (a)(2). Written comments on the scope of the environmental analysis will be considered (if received by the SCAQMD during the 33-day review period) when preparing the Draft EA. Responses to comments on the NOP/IS will be included in the Draft EA.

### **PROJECT LOCATION**

The SCAQMD has jurisdiction over an area of 10,473 square miles (referred to hereafter as the district), consisting of the four-county South Coast Air Basin and the Riverside County portions of the Salton Sea Air Basin (SSAB) and the Mojave Desert Air Basin (MDAB). The Basin, which is a subarea of the SCAQMD's jurisdiction, is bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The 6,745 square-mile Basin includes all of Orange County and the nondesert portions of Los Angeles, Riverside, and San Bernardino counties. The Riverside County portion of the SSAB and MDAB is bounded by the San Jacinto Mountains in the west and spans eastward up to the Palo Verde Valley. The federal nonattainment area (known as the Coachella Valley Planning Area) is a subregion of both Riverside County and the SSAB and is bounded by the San Jacinto

Mountains to the west and the eastern boundary of the Coachella Valley to the east (Figure 1). The manufacturing and use of the adhesives and sealants takes place throughout the SCAQMD, jurisdiction, thus impacting regional VOC emissions.



**Figure 1**  
**Boundaries of the South Coast Air Quality Management District**

## PROJECT BACKGROUND

Rule 1168 – Adhesive and Sealant Applications, controls VOC emissions from the use of adhesives and sealants used by stationary and industrial area sources, including commercial and consumer uses. Industrial sources use a wide variety of adhesives and sealants including for structural, thermal, or electrical applications to bond metals, plastics and composites of plastics, glass, ceramics, rubber, and paper to themselves or to each other. Companies in the district that use adhesives and sealants are engaged in a variety of activities including the assembly of corrugated boxes, motor vehicle parts and accessories, motor homes, metal and wood office furniture, pen and mechanical pencil parts, tire retreading and repairs, hardwood veneers, plastic foam products, wood office furniture and shelving, wood kitchen cabinets, fabricated metal parts and products, household furniture, electronic components and accessories, industrial machinery, and fabricated textile products. The commercial sector of the adhesives market is largely architecturally based. Application examples include: indoor and outdoor carpeting, carpet pad, wood flooring, ceramic tile, dry wall, paneling, subfloor, rubber floor, cove base, vinyl composition tile (VCT) and asphalt tile, single-ply roof membrane adhesives, and most of the plastic pipe welding and priming applications.

## PROJECT DESCRIPTION

The following is a summary of the key components proposed amendments to PAR 1168. A copy of PAR 1168 can be found in Appendix A.

- Amend VOC limits for certain adhesives, adhesive applications, sealants and caulks, and sealant primers.
- Establish new categories and VOC content limits.

- Revise, delete, and add certain definitions. Add limited exemptions for exterior roofing products containing tertiary-butyl acetate (TBAC) and dimethyl carbonate (DMC).
- Prohibit the use of Group II Exempt Solvents, except volatile methyl siloxanes, for regulated products.
- Remove or limit some existing exemptions.
- Expand the applicability of the rule to include aerosol adhesives and consumer products.
- Include streamlined recordkeeping options for regulated products with VOC content of 50 grams per liter or less.
- Clarify that the rule applies to certain consumer product adhesives, adhesive applications, sealants and caulks, and sealant primers not regulated by the California Air Resources Board.
- Add requirements for labeling regulated product containers.
- Add test methods for VOC content analysis.
- Include annual reporting requirements for sales of regulated products.

### **ALTERNATIVES**

The Draft EA will discuss and compare a reasonable range of alternatives to the proposed project as required by CEQA and by SCAQMD Rule 110 where there are potential significant adverse impacts. Alternatives must include realistic measures for attaining the basic objectives of the proposed project and provide a means for evaluating the comparative merits of each alternative. In addition, the range of alternatives must be sufficient to permit a reasoned choice and it need not include every conceivable project alternative. The key issue is whether the selection and discussion of alternatives fosters informed decision making and public participation. A CEQA document need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative.

SCAQMD Rule 110 does not impose any greater requirements for a discussion of project alternatives in an environmental assessment than are required for an Environmental Impact Report under CEQA. Alternatives will be developed based in part on the major components of the proposed rule. The rationale for selecting alternatives rests on CEQA's requirement to present "realistic" alternatives; that is alternatives that can actually be implemented. CEQA also requires an evaluation of a "No Project Alternative."

SCAQMD's policy document Environmental Justice Program Enhancements for fiscal year (FY) 2002-03, Enhancement II-1 recommends that all SCAQMD CEQA assessments include a feasible project alternative with the lowest air toxics emissions. In other words, for any major equipment or process type under the scope of the proposed project that creates a significant environmental impact, at least one alternative, where feasible, shall be considered from a "least harmful" perspective with regard to hazardous air emissions.

The SCAQMD may choose to adopt any portion or the entirety of any alternative presented in the EA. The SCAQMD is able to adopt any portion or the entirety of any of the alternatives presented because the impacts of each alternative will be fully disclosed to the public and the public will have the opportunity to comment on the alternatives and impacts generated by each alternative.

Written suggestions on potential project alternatives received during the comment period for the Initial Study will be considered when preparing the Draft EA.

## **CHAPTER 2**

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**Introduction**

**General Information**

**Environmental Factors Potentially Affected**

**Determination**

**Environmental Checklist and Discussion**

## **INTRODUCTION**

The environmental checklist provides a standard evaluation tool to identify a project's adverse environmental impacts. This checklist identifies and evaluates potential adverse environmental impacts that may be created by the proposed project.

## **GENERAL INFORMATION**

Project Title:	Proposed Amended Rule 1168
Lead Agency Name:	South Coast Air Quality Management District
Lead Agency Address:	21865 Copley Drive, Diamond Bar, CA 91765
Rule Contact Person:	Michael Morris, (909) 396-3282
CEQA Contact Person:	James Koizumi, (909) 396-3234
Project Sponsor's Name:	South Coast Air Quality Management District
Project Sponsor's Address:	21865 Copley Drive, Diamond Bar, CA 91765
General Plan Designation:	Not applicable
Zoning:	Not applicable
Description of Project:	PAR 1168 would amend volatile organic compound (VOC) content limits for certain adhesives, adhesive applications, sealants and caulks, and sealant primers; establish new categories and VOC content limits; define tertiary butyl acetate and dimethyl carbonate as exempt VOCs from roofing regulated products; expand the applicability of the rule to include some aerosol adhesives and consumer products used in manufacturing operations; remove or limit some existing exemptions; include annual reporting requirements for sales of regulated products; prohibit the use of Group II exempt solvents, except volatile methyl siloxanes, for regulated products; and include additional administrative requirements and corrections to clarify rule language and remove obsolete provisions.
Surrounding Land Uses and Setting:	Any person who sells, stores, supplies, offers for sale, or manufactures for sale any adhesives and sealants. Industrial, institutional, commercial and consumer users of adhesives and sealants.
Other Public Agencies Whose Approval is Required:	Not applicable

**ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED**

The following environmental impact issues have been assessed to determine their potential to be affected by the proposed project. As indicated by the checklist on the following pages, environmental topics marked with an "✓" may be adversely affected by the proposed project. An explanation relative to the determination of impacts can be found following the checklist for each area.

- |  |   |  |
|--|---|--|
| <input type="checkbox"/> Aesthetics                          | <input type="checkbox"/> Geology and Soils                          | <input type="checkbox"/> Population and Housing        |
| <input type="checkbox"/> Agricultural and Forestry Resources | <input checked="" type="checkbox"/> Hazards and Hazardous Materials | <input type="checkbox"/> Public Services               |
| <input checked="" type="checkbox"/> Air Quality              | <input type="checkbox"/> Hydrology and Water Quality                | <input type="checkbox"/> Recreation                    |
| <input type="checkbox"/> Biological Resources                | <input type="checkbox"/> Land Use and Planning                      | <input type="checkbox"/> Solid/Hazardous Waste         |
| <input type="checkbox"/> Cultural Resources                  | <input type="checkbox"/> Mineral Resources                          | <input type="checkbox"/> Transportation/Traffic        |
| <input type="checkbox"/> Energy                              | <input type="checkbox"/> Noise                                      | <input checked="" type="checkbox"/> Mandatory Findings |

**DETERMINATION**

On the basis of this initial evaluation:

- I find the proposed project, in accordance with those findings made pursuant to CEQA Guideline §15252, COULD NOT have a significant effect on the environment, and that an ENVIRONMENTAL ASSESSMENT with no significant impacts has been prepared.
- I find that although the proposed project could have a significant effect on the environment, there will NOT be significant effects in this case because revisions in the project have been made by or agreed to by the project proponent. An ENVIRONMENTAL ASSESSMENT with no significant impacts will be prepared.
- I find that the proposed project MAY have a significant effect(s) on the environment, and an ENVIRONMENTAL ASSESSMENT will be prepared.
- I find that the proposed project MAY have a "potentially significant impact" on the environment, but at least one effect 1)has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL ASSESSMENT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier ENVIRONMENTAL ASSESSMENT pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL ASSESSMENT, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

**Date:** December 10, 2013

**Signature:**



Michael Krause  
Program Supervisor, CEQA Section  
Planning, Rules, and Area Sources

**DISCUSSION AND EVALUATION OF ENVIRONMENTAL IMPACTS**

PAR 1168 would amend volatile organic compound (VOC) content limits for certain adhesives, adhesive applications, sealants and caulks, and sealant primers; establish new categories and VOC content limits; define tertiary butyl acetate and dimethyl carbonate as exempt VOCs from roofing regulated products; expand the applicability of the rule to include some aerosol adhesives and consumer products used in manufacturing operations; remove or limit some existing exemptions; include annual reporting requirements for sales of regulated products; prohibit the use of Group II exempt solvents, except volatile methyl siloxanes, for regulated products; and include additional administrative requirements and corrections to clarify rule language and remove obsolete provisions.

There are various formulations of adhesives and sealants that comply with current VOC content limits in Rule 1168. These formulations can be categorized as:

- Solvent based products – Solvents in these products comply with current VOC content limits in Rule 1168. Toxic air contaminant (TAC) emissions are limited by methylene chloride restrictions in Rule 1168, Rules 1401 and 1402, Proposition 69, and AB2588 if applicable. However, flammability is dependent on the solvents that comprise the affected products, fire and Occupational Safety and Health Administration (OSHA) regulations.
- Waterborne products – Waterborne products are low in VOC and TAC content. Low VOC content and water content limit potential for flammability.
- Acetone containing products – Acetone is not a VOC as it is currently listed as a Group I exempt solvent pursuant to SCAQMD Rule 102. Acetone is typically used to replace VOC solvents in affected products resulting in a low VOC product. Acetone is not a TAC, but has a hazard impact potential. Acetone is rated “three” for flammability by the NFPA which means that it is considered to be highly flammable. Flammability is typically controlled by local fire department regulations Occupational Safety and Health Administration (OSHA) regulations.
- Parachlorobenzotrifluoride (PCBTF) containing products – PCBTF is not a VOC as it is currently listed as a Group I exempt solvent pursuant to SCAQMD Rule 102. PCBTF is typically used to replace VOC solvents in affected products resulting in a low VOC product. PCBTF is not a TAC, but has hazard impact potential. Toxic air contaminant (TAC) emissions are limited by methylene chloride limitations in Rule 1168, Rules 1401 and 1402, Proposition 69, and AB2588 if applicable. PCBTF is rated “one” for flammability by the NFPA which means that it is considered to be slightly flammable or combustible if heated.

The proposed project may result in reformulation of affected products since it would lower the VOC content limit for a number of categories (see Chapter 1), define tBAC and DMC as exempt VOCs from roofing regulated products likely prompting and increase in use of tBAC and DMC, and restrict the use of SCAQMD Rule 102 Group II exempt solvents.

There are three scenarios that may occur if affected projects are reformulated:

- Increase the use of waterborne affected products. This is expected to reduce VOC and TAC emissions, lower flammability and increase water usage and wastewater generation.
- Increase the use of acetone containing affected products. This is expected to reduce VOC and TAC emissions, and potentially increase flammability. Since these products are solvent based there would be no affect on water use or wastewater generation.

- Increase the use of PCBTF containing affected products. This is expected to reduce VOC and TAC emissions. Since these products are solvent based there would be no affect on water use or wastewater generation.
- Increase the use of tBAC and DMC containing affected products. This is expected to reduce VOC and TAC emissions. OEHHA and ARB have evaluated TAC emission impacts from tBAC. The health risk values for tBAC used by OEHHA and ARB are used by SCAQMD staff to estimate TAC emission impacts from tBAC. Methanol is a degradation product of DMC. Methanol is a TAC and has been used by ARB to evaluate TAC emission impacts from DMC. Therefore, TAC emission impacts from tBAC and DMC may increase. Since these products are solvent based there would be no affect on water use or wastewater generation.
- Increase the use of other solvents in affected products. The use of solvent based products that currently meet the future VOC content limits proposed by PAR 1168 may increase. This is expected to reduce VOC emissions. TAC emissions and flammability may increase or decrease depending on the solvent. Since these products are solvent based there would be no affect on water use or wastewater generation.

Based on working group discussions, PAR 1168 is not expected to result in the use of new or additional use of existing air pollution control technology.

PAR 1168 would regulate aerosol affected products that are greater than one pound or 16 fluid ounces or where there is no applicable VOC limit in the ARB Consumer Product Regulation. An aerosol is basically a liquid under pressure. A propellant is the pressurized gas in equilibrium with its liquid, so when the aerosol spray valve is opened, the liquid is forced out along with some propellants to ensure an even pressure within the can. The reformulation of aerosol products is expected to result in the use of lower VOC solvents or lower VOC propellants. However, moving away from hydrocarbons to hydrofluorocarbons (HFCs) or CO<sub>2</sub> could increase these GHG emissions. However, costs and regulations of HFCs could restrict the use of HFCs.

Reporting, recordkeeping or other administrative requirements are expected to continue to assist with ensuring compliance and enforcement of PAR 1168. However, reporting, recordkeeping or other administrative requirements or corrections, themselves, are not expected to result in any environmental impacts.

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	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
<b>I. AESTHETICS.</b> Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Significance Criteria

The proposed project impacts on aesthetics will be considered significant if:

- The project will block views from a scenic highway or corridor.
- The project will adversely affect the visual continuity of the surrounding area.
- The impacts on light and glare will be considered significant if the project adds lighting which would add glare to residential areas or sensitive receptors.

### Discussion

**I. a), b), c), & d)** Compliance with PAR 1168 is expected to be met by reformulation of adhesives and sealants. Air pollution control equipment is not expected to be required. Therefore, PAR 1168 is not expected to require construction activities to install air pollution control equipment. Thus, implementation of PAR 1168 would not result in any new construction of buildings or other structures that would obstruct scenic resources or degrade the existing visual character of a site, including but not limited to, trees, rock outcroppings, or historic buildings. Similarly, additional light or glare would not be created which would adversely affect day or nighttime views in the area because no light generating equipment would be required to comply with PAR 1168. Further, the manufacturing of compliant adhesives and sealants would not appreciably change the visual profile of the building(s) where compliant adhesives and sealants are manufactured, because any changes to the manufacturing process would occur inside the facility's buildings and, therefore, would not affect the exterior of the structure in any way. PAR 1168 compliant adhesives and sealants are expected to be used in a similar fashion to existing adhesives and sealants, e.g., brushed, rolled or sprayed on to surfaces. Therefore, no changes in aesthetics are expected from the use of PAR 1168 compliant adhesives and sealants.

Based upon the above considerations, the proposed project would not create new adverse aesthetics impacts. Because no significant aesthetics impacts were identified, no mitigation

measures are necessary. Therefore, this topic will not need to be evaluated further in the Draft EA.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
<b>II. AGRICULTURE AND FORESTRY RESOURCES.</b> Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland mapping and Monitoring Program of the California Resources Agency, to non- agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code § 12220(g)), timberland (as defined by Public Resources Code § 4526), or timberland zoned Timberland Production (as defined by Government Code § 51104 (g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Significance Criteria**

Project-related impacts on agriculture and forest resources will be considered significant if any of the following conditions are met:

- The proposed project conflicts with existing zoning or agricultural use or Williamson Act contracts.
- The proposed project will convert prime farmland, unique farmland or farmland of statewide importance as shown on the maps prepared pursuant to the farmland mapping and monitoring program of the California Resources Agency, to non-agricultural use.
- The proposed project conflicts with existing zoning for, or causes rezoning of, forest land (as defined in Public Resources Code § 12220(g)), timberland (as defined in Public Resources Code § 4526), or timberland zoned Timberland Production (as defined by Government Code § 51104 (g)).
- The proposed project would involve changes in the existing environment, which due to their location or nature, could result in conversion of farmland to non-agricultural use or conversion of forest land to non-forest use.

**Discussion**

**II. a), b), c), & d)** The proposed project would not result in any new construction of buildings or other structures, therefore, implementation of the amendments to the rule would not convert farmland to non-agricultural use or conflict with zoning for agricultural use or a Williamson Act contract. The manufacture of compliant adhesives and solvents is expected to occur completely within the confines of existing affected industrial facilities and would not require converting farmland to non-agricultural uses. The use of rule compliant adhesives and sealants is expected to be similar to the use of existing adhesives and sealants, and would not impact agricultural or forestry resources. For the same reasons, the manufacturing and use of compliant adhesives and sealants would not result in the loss of forest land or conversion of forest land to non-forest use particularly since adhesives and sealants affected by PAR 1168 are typically found in urban settings.

Based on the discussion above, the proposed project is not expected to result in converting farmland to non-agricultural use; or conflict with existing zoning for agricultural use, or a Williamson Act contract. Similarly, it is not expected that PAR 1168 would conflict with existing zoning for, or cause rezoning of, forest land; or result in the loss of forest land or conversion of forest land to non-forest use. Consequently, the proposed project would not create any significant adverse agriculture or forestry impacts. Because no significant agriculture or forestry resources impacts were identified, no mitigation measures are necessary. Therefore, this topic will not need to be evaluated further in the Draft EA.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
<b>III. AIR QUALITY AND GREENHOUSE GAS EMISSIONS.</b>				
Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Violate any air quality standard or contribute to an existing or projected air quality violation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
d) Expose sensitive receptors to substantial pollutant concentrations?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Diminish an existing air quality rule or future compliance requirement resulting in a significant increase in air pollutant(s)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Significance Criteria

To determine whether or not air quality impacts from the proposed project may be significant, impacts will be evaluated and compared to the criteria in Table 2-1. If impacts exceed any of the criteria in Table 2-1, they will be considered further in the Draft EA. As necessary, all feasible mitigation measures will be identified in the Draft EA and implemented to reduce significant impacts to the maximum extent feasible.

### Discussion

**III. a)** The 2012 AQMP includes Control Measure CTS-02 – Further Emission Reduction from Miscellaneous Coatings, Adhesive, Solvents and Lubricants, that lists adhesives and solvent rules to achieve additional VOC reductions to assist in meeting the ozone standards. PAR1168 would partially implement CTS-02 and MCS-01. Therefore, by implementing PAR 1168, which was part of the 2012 AQMP’s CTS-02, the proposed project is not expected to conflict with or obstruct implementation of the applicable air quality control plan because the 2012 AQMP demonstrates that the effects of all existing rules, in combination with implementing all AQMP control measures (including “black box” measures not specifically described in the 2012 AQMP) would bring the district into attainment with all applicable national and state ambient air quality standards. Therefore, PAR 1168 is not expected to significantly conflict or obstruct implementation of the applicable air quality plan, but would contribute to attaining and maintaining the ozone standards.

**Table 2-1**  
**SCAQMD Air Quality Significance Thresholds**

<i>Mass Daily Thresholds<sup>a</sup></i>		
<b>Pollutant</b>	<b>Construction<sup>b</sup></b>	<b>Operation<sup>c</sup></b>
<b>NOx</b>	100 lbs/day	55 lbs/day
<b>VOC</b>	75 lbs/day	55 lbs/day
<b>PM10</b>	150 lbs/day	150 lbs/day
<b>PM2.5</b>	55 lbs/day	55 lbs/day
<b>SOx</b>	150 lbs/day	150 lbs/day
<b>CO</b>	550 lbs/day	550 lbs/day
<b>Lead</b>	3 lbs/day	3 lbs/day
<i>Toxic Air Contaminants (TACs), Odor, and GHG Thresholds</i>		
<b>TACs</b> (including carcinogens and non-carcinogens)	Maximum Incremental Cancer Risk $\geq$ 10 in 1 million Cancer Burden > 0.5 excess cancer cases (in areas $\geq$ 1 in 1 million) Chronic & Acute Hazard Index $\geq$ 1.0 (project increment)	
<b>Odor</b>	Project creates an odor nuisance pursuant to SCAQMD Rule 402	
<b>GHG</b>	10,000 MT/yr CO <sub>2</sub> eq for industrial facilities	
<i>Ambient Air Quality Standards for Criteria Pollutants<sup>d</sup></i>		
<b>NO<sub>2</sub></b>  1-hour average annual arithmetic mean	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 0.18 ppm (state) 0.03 ppm (state) and 0.0534 ppm (federal)	
<b>PM10</b> 24-hour average annual average	10.4 $\mu\text{g}/\text{m}^3$ (construction) <sup>e</sup> & 2.5 $\mu\text{g}/\text{m}^3$ (operation) 1.0 $\mu\text{g}/\text{m}^3$	
<b>PM2.5</b> 24-hour average	10.4 $\mu\text{g}/\text{m}^3$ (construction) <sup>e</sup> & 2.5 $\mu\text{g}/\text{m}^3$ (operation)	
<b>SO<sub>2</sub></b> 1-hour average 24-hour average	0.25 ppm (state) & 0.075 ppm (federal – 99 <sup>th</sup> percentile) 0.04 ppm (state)	
<b>Sulfate</b> 24-hour average	25 $\mu\text{g}/\text{m}^3$ (state)	
<b>CO</b>  1-hour average 8-hour average	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 20 ppm (state) and 35 ppm (federal) 9.0 ppm (state/federal)	
<b>Lead</b> 30-day Average Rolling 3-month average Quarterly average	1.5 $\mu\text{g}/\text{m}^3$ (state) 0.15 $\mu\text{g}/\text{m}^3$ (federal) 1.5 $\mu\text{g}/\text{m}^3$ (federal)	

<sup>a</sup> Source: SCAQMD CEQA Handbook (SCAQMD, 1993)

<sup>b</sup> Construction thresholds apply to both the South Coast Air Basin and Coachella Valley (Salton Sea and Mojave Desert Air Basins).

<sup>c</sup> For Coachella Valley, the mass daily thresholds for operation are the same as the construction thresholds.

<sup>d</sup> Ambient air quality thresholds for criteria pollutants based on SCAQMD Rule 1303, Table A-2 unless otherwise stated.

<sup>e</sup> Ambient air quality threshold based on SCAQMD Rule 403.

KEY: lbs/day = pounds per day    ppm = parts per million     $\mu\text{g}/\text{m}^3$  = microgram per cubic meter     $\geq$  = greater than or equal to  
MT/yr CO<sub>2</sub>eq = metric tons per year of CO<sub>2</sub> equivalents     $>$  = greater than

### III. b) and f) *Criteria Pollutants*

#### *Construction Impacts*

Compliance with PAR 1168 is not expected to generate construction activities such as building new structures or installing air pollution control equipment because compliance with PAR 1168 is expected to be met by reformulation of adhesives and sealants. Thus, PAR 1168 is not expected to require the operation of heavy construction equipment or construction activities (e.g., demolition, paving, etc.) to build new structures or install control equipment.

#### *Operational Impacts*

Compliance with PAR 1168 is expected to be met by reformulation of adhesives and sealants. Based on available product information, solvent based adhesives and sealants would be replaced with adhesives and sealants reformulated with water or VOC exempt solvents. PAR 1168 is expected to result in the reformulation of existing adhesives or sealants with VOC exempt solvents or waterborne. However, specific details on the reformulations are not known at this time. However, the reduction in VOC content is expected only to affect VOC emissions, i.e., no other criteria pollutant emissions. Detailed analysis of criteria pollutants will be prepared for the Draft EA.

### III. c) *Cumulatively Considerable Impacts*

PAR 1168 will be evaluated for cumulatively considerable air quality impacts in the Draft EA.

### III. d) *Toxic Air Contaminants*

Compliance with PAR 1168 is expected to be met by reformulation of adhesives and sealants. Based on available information, solvent based adhesives and sealants would be replaced with adhesives and sealants reformulated with water or VOC exempt solvents. Waterborne formulations typically have low toxicity. VOC exempt solvents acetone and PCBTF do not have toxic values identified by OEHHA or ARB.

#### Toxicity Values

Cancer potency factors and reference exposure levels (RELs) from Appendix L of the SCAQMD Risk Assessment Procedures for Rules 1401 and 212, Version 7.0 (<http://www.aqmd.gov/prdas/pdf/1401AttL7Dec2012.pdf>) will be used to estimate health risk impacts from conventional solvent replacement due to the proposed project.

Technical Support Document for Exposure Assessment and Stochastic Analysis document (Appendix A) lists tBAC as a substances for which emissions must be quantified for the air toxics hot spots program ([http://www.oehha.ca.gov/air/hot\\_spots/pdf/2012tsd/TSDportfolio2012.pdf](http://www.oehha.ca.gov/air/hot_spots/pdf/2012tsd/TSDportfolio2012.pdf)). An inhalation unit risk value for tBAC of  $4 \times 10^{-7} (\mu\text{g}/\text{m}^3)^{-1}$  was derived by the OEHHA and used by ARB in their Environmental Impact Assessment of Tertiary-butyl Acetate, Staff Report, January 2006 (<http://www.arb.ca.gov/research/reactivity/tbacf.pdf>). ARB has since recommended the use of cancer potency for the estimation of carcinogenic health risks. The equivalent cancer potency factor for tBAC is  $2.0 \times 10^{-3} (\text{mg}/\text{kg}\text{-day})^{-1}$ . Acute non-carcinogenic health risks were estimated by ARB using an acute REL of  $10,000 \mu\text{g}/\text{m}^3$ .

At this time, CARB and OEHHA have not conducted an assessment of the health effects of exposure to dimethyl carbonate, although both agencies have done extensive research on methanol toxicity as part of the methyl formate VOC exemption petition. The SCAQMD has

submitted a request with OEHHA to evaluate any health concerns from the use of dimethyl carbonate. Since no toxic values (not even interim) have been released by OEHHA, a toxic health risk assessment analysis cannot be performed for dimethyl carbonate. In the absence of toxic values from OEHHA and in an effort to further evaluate potential health impacts, SCAQMD staff conducted a health risk assessment for dimethyl carbonate using the toxic values for methanol for the 2009 amendments to Rule 102, which is the primary metabolite of dimethyl carbonate. This methodology is similar to OEHHA's approach of assessing the effects of the known metabolites of a substance during its evaluation of the health effects from exposure to tertiary butyl acetate. The methanol emissions were estimated based on a two-to-one stoichiometric ratio of dimethyl carbonate to methanol. Methanol has an overall low acute (2.80E+04 ug/m<sup>3</sup>) and chronic (4.00E+03 ug/m<sup>3</sup>) toxicity level and is not listed as a known carcinogen on the State of California Proposition 65 list.

#### **Adverse Toxic Impact Analysis for Off-site Exposure**

Off-site exposure analysis will follow SCAQMD the SCAQMD Risk Assessment Procedures for Rules 1401 and 212, Version 7.0 (<http://www.aqmd.gov/prdas/pdf/riskassessmentprocedures-v7.pdf>).

#### **Adverse Toxic Impact Analysis for On-site Exposure**

1. Potential reformulation of affected products may result in the reasonable foreseeable use of toxic solvents. Thus, there could be occupational (on-site) exposure to formulations that are not currently used at existing facilities (e.g., tBAC, isocyanates, etc.)
2. OSHA has established permissible exposure limits (PELs) for exposure to toxics (e.g., OSHA 8-hour PEL for tBAC is 200 ppm). SCAQMD will rely on compliance with the OSHA PEL values to determine adverse non-cancer exposure impacts.
3. OSHA PELs may not reflect the adverse carcinogenic toxic impacts to on-site exposure.
4. ARB has presented a "box model" method for estimating adverse toxic impacts to on-site workers from tBAC in Environmental Impact Assessment of Tertiary-Butyl Acetate, Staff Report, January 2006 (<http://www.arb.ca.gov/research/reactivity/tbacf.pdf>). This method may generate carcinogenic health risk results that are not meaningful (e.g., OEHHA has found that in cases where the toxic concentration was "high enough the linear approximation was no longer accurate"<sup>4</sup>).
5. SCAQMD staff is developing an alternative method to determine if adverse toxic impacts would be significant based on net change from existing formulations.
  - a. This methodology would be a toxicity and mass weighted comparison (mass x cancer potency factor).
  - b. If the proposed project value is less than the existing setting, then adverse carcinogenic impact from the proposed project would be considered less than significant.

Specific reformulation information is not known at this time; therefore, adverse toxic air contaminant impacts from the reformulation of adhesives and sealants will be evaluated in the Draft EA.

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<sup>4</sup> OEHHA, Occupational Health Hazard Risk Assessment Project for California: Identification Of Chemicals Of Concern, Possible Risk Assessment Methods, And Examples Of Health Protective Occupational Air Concentrations, December 2007, [www.cdph.ca.gov/programs/hesis/Documents/riskreport.pdf](http://www.cdph.ca.gov/programs/hesis/Documents/riskreport.pdf).

**III. e) Odor Impacts**

Odor problems depend on individual circumstances, materials involved, and individual odor sensitivities. For example, individuals can differ quite markedly from the population average in their sensitivity to odor due to any variety of innate, chronic or acute physiological conditions. This includes olfactory adaptation or smell fatigue (i.e., continuing exposure to an odor usually results in a gradual diminution or even disappearance of the smell sensation).

The odors from adhesives and sealants are typically related to the types and amounts of solvents used in the adhesives and sealants. Compliance with PAR 1168 is expected to be met by reformulation of adhesives and sealants. Based on available information, solvent based adhesives and sealants would be replaced with adhesives and sealants reformulated with water or VOC exempt solvents. The exact reformulations are not known at this time. Because replacement solvents could be more odorous, an odor impact analysis will be prepared for the Draft EA.

**III. g) and h) Greenhouse Gas Impacts**

Global warming is the observed increase in average temperature of the earth's surface and atmosphere. The primary cause of global warming is an increase of greenhouse gas (GHG) emissions in the atmosphere. The six major types of GHG emissions are carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), sulfur hexafluoride (SF<sub>6</sub>), halofluorocarbons (HFCs), and perfluorocarbons (PFCs). The GHG emissions absorb longwave radiant energy emitted by the earth, which warms the atmosphere. The GHGs also emit longwave radiation both upward to space and back down toward the surface of the earth. The downward part of this longwave radiation emitted by the atmosphere is known as the "greenhouse effect."

The current scientific consensus is that the majority of the observed warming over the last 50 years can be attributable to increased concentration of GHG emissions in the atmosphere due to human activities. Events and activities, such as the industrial revolution and the increased consumption of fossil fuels (e.g., combustion of gasoline, diesel, coal, etc.), have heavily contributed to the increase in atmospheric levels of GHG emissions. As reported by the California Energy Commission (CEC), California contributes 1.4 percent of the global and 6.2 percent of the national GHG emissions (CEC, 2004). Further, approximately 80 percent of GHG emissions in California are from fossil fuel combustion (e.g., gasoline, diesel, coal, etc.).

Based on discussions with aerosol manufactures, lower VOC content limits for regulated product aerosols may result in replacement of VOC propellants with VOC exempt propellants. The reformulation of aerosol products is expected to result in the use of lower VOC solvents or lower VOC propellants. However, moving away from hydrocarbons to hydrofluorocarbons (HFCs) or CO<sub>2</sub> could increase these GHG emissions. However, costs and regulations of HFCs could restrict the use of HFCs. A GHG impact analysis will be prepared for the Draft EA.

**Conclusion**

Potential adverse air quality impacts will be further analyzed in the Draft EA.

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	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
<b>IV. BIOLOGICAL RESOURCES.</b>				
Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by §404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### **Significance Criteria**

Impacts on biological resources will be considered significant if any of the following criteria apply:

- The project results in a loss of plant communities or animal habitat considered to be rare, threatened or endangered by federal, state or local agencies.
- The project interferes substantially with the movement of any resident or migratory wildlife species.
- The project adversely affects aquatic communities through construction or operation of the project.

### **Discussion**

**IV. a), b), c) & d)** Manufacturing of adhesives and sealants that comply with PAR 1168 is expected to occur within existing structures at industrial facilities that already manufacture adhesives and sealants. The use and application of compliant adhesives and sealants is expected to be similar to the use and application of existing adhesives and sealants onto products that need to adhere to or seal a surface. This activity typically does not take place on greenfields, riparian habitats, sensitive natural communities or wetlands. Thus, the modification to Rule 1168 would have no effect on biological habitat or wetlands. The reformulation of adhesives and sealants to comply with PAR 1168 are similar to the formulation in existing adhesives and sealants except new compliant adhesives and solvents are expected to be formulated with water, low- solvent, VOC exempt solvents or less toxic solvents to meet the lower VOC content limit and comply with existing toxic Rules (e.g., 1401 and 1402).

PAR 1168 would not require the construction of any new buildings or other structures. As a result, implementing PAR 1168 is not expected to adversely affect in any way habitats that support riparian habitat, are federally protected wetlands, or are migratory corridors. Similarly, special status plants, animals, or natural communities are not expected to be adversely affected.

**IV. e) & f)** It is not envisioned that PAR 1168 would conflict with local policies or ordinances protecting biological resources or local, regional, or state conservation plans because the proposed project does not require construction of any structures or new development in protected areas. Additionally, PAR 1168 would not conflict with any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or any other relevant habitat conservation plan for the same reason.

The SCAQMD, as the Lead Agency for the proposed project, has found that, when considering the record as a whole, there is no evidence that PAR 1168 would have potential for any new adverse effects on wildlife resources or the habitat upon which wildlife depends. Accordingly, based upon the preceding information, the SCAQMD believes that the presumption of adverse effect contained in §753.5 (d), Title 14 of the California Code of Regulations is adequately rebutted.

Based upon these considerations, significant adverse biological resources impacts are not anticipated and, therefore, no further analysis is required. Because no significant adverse biological resources impacts were identified, no mitigation measures are necessary. Therefore, this topic will not need to be evaluated further in the Draft EA.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
<b>V. CULTURAL RESOURCES.</b> Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource, site, or feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Disturb any human remains, including those interred outside formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Significance Criteria

Impacts to cultural resources will be considered significant if:

- The project results in the disturbance of a significant prehistoric or historic archaeological site or a property of historic or cultural significance to a community or ethnic or social group.
- Unique paleontological resources are present that could be disturbed by construction of the proposed project.
- The project would disturb human remains.

### Discussion

**V. a), b), c), & d)** PAR 1168 does not require construction of new facilities, increasing the floor space of existing facilities establishing new or additional foundation, or any other construction activities that would require disturbing soil that may contain cultural resources. Because no heavy-duty construction-related activities requiring soil disturbance would be associated with the implementation of PAR 1168, no impacts to historical or cultural resources are anticipated to occur. Further, PAR 1168 is not expected to require physical changes to the environment, which may disturb paleontological or archaeological resources or disturb human remains interred outside of formal cemeteries.

Based upon these considerations, significant adverse cultural resources impacts are not anticipated and, therefore, no further analysis is required. Because no significant adverse cultural resources impacts were identified, no mitigation measures are necessary. Therefore, this topic will not need to be evaluated further in the Draft EA.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
<b>VI. ENERGY.</b> Would the project:				
a) Conflict with adopted energy conservation plans?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the need for new or substantially altered power or natural gas utility systems?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Create any significant effects on local or regional energy supplies and on requirements for additional energy?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create any significant effects on peak and base period demands for electricity and other forms of energy?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Comply with existing energy standards?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Significance Criteria

Impacts to energy and mineral resources will be considered significant if any of the following criteria are met:

- The project conflicts with adopted energy conservation plans or standards.
- The project results in substantial depletion of existing energy resource supplies.
- An increase in demand for utilities impacts the current capacities of the electric and natural gas utilities.
- The project uses non-renewable resources in a wasteful and/or inefficient manner.

### Discussion

**VI. a) & e)** Those who manufacture or use compliant adhesives and sealants are expected to comply with any relevant existing energy conservation plans and standards because compliant adhesives and sealants are expected to be manufactured and applied using the same equipment as is currently used and therefore no impact was identified.

**VI. b), c), & d)** The manufacturing and use of compliant adhesives and sealants is expected to create little or no additional demand for energy at affected facilities because activities and practices that involve the manufacturing or application are not expected to change as a result of implementing PAR 1168. Reformulated affected products are expected to be manufactured in existing equipment and in a similar manner, so no change in energy use is expected. Compliant adhesives and sealants are expected to be applied in a similar manner to existing adhesives and sealants (i.e., sprayed, rolled or brushed on surfaces). As such, PAR 1168 would require little or no additional energy use to manufacture or apply compliant adhesives and sealants that would increase the demand for energy or require new or modified energy utilities. No construction is expected to be required.

In light of the above information and because the primary effect of PAR 1168 would be adhesives and sealants with slightly different formulations, PAR 1168 would not create any

significant adverse effects on peak and base period demands for electricity, natural gas, or other forms of energy, or adversely affect energy producers or energy distribution infrastructure.

Based on the preceding discussion, PAR 1168 would not create any significant effects on peak and base period demands for electricity or other forms of energy and it is expected that any affected facilities would continue to comply with existing energy standards. Based upon these considerations, significant adverse energy impacts are not anticipated and, therefore, no further analysis is required. Because no significant adverse energy impacts were identified, no mitigation measures are necessary. Therefore, this topic will not need to be evaluated further in the Draft EA.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
<b>VII. GEOLOGY AND SOILS.</b> Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Significance Criteria

Impacts on the geological environment will be considered significant if any of the following criteria apply:

- Topographic alterations would result in significant changes, disruptions, displacement, excavation, compaction or over covering of large amounts of soil.
- Unique geological resources (paleontological resources or unique outcrops) are present that could be disturbed by the construction of the proposed project.
- Exposure of people or structures to major geologic hazards such as earthquake surface rupture, ground shaking, liquefaction or landslides.
- Secondary seismic effects could occur which could damage facility structures, e.g., liquefaction.
- Other geological hazards exist which could adversely affect the facility, e.g., landslides, mudslides.

### Discussion

**VII. a)** There are no provisions in PAR 1168 that would require the construction of new or modified structures or the construction or installation of air pollution control equipment that would call for the disruption or overcovering of soil, changes in topography or surface relief features, the erosion of beach sand, or a change in existing siltation rates. The manufacture of compliant adhesives and sealants is expected to occur at existing industrial facilities that already manufacture existing adhesives and sealants and no changes to equipment or operations are expected to be necessary to manufacture compliant adhesives and sealants. It is expected that contractors or consumers who use compliant adhesives and sealants, would use these products in a similar manner to existing adhesives and sealants, so effects, if any, on geology or soils would not change compared to the existing setting.

Since PAR 1168 would not require the construction of new structures or modify any existing structures where adhesives and sealants are currently being manufactured and/or applied, PAR 1168 would not expose persons or property to new geological hazards such as earthquakes, landslides, mudslides, ground failure, or other natural hazards, because the manufacturing and application of PAR 1168 adhesives and sealants are not expected to change from the current existing locations.

**VII. b)** PAR 1168 is not expected to require construction activities to install or build new structures or control equipment because compliance with PAR 1168 is expected to be met by reformulation of adhesives and sealants. Since PAR 1168 would not involve heavy construction activities to build new structures or install control equipment, no soil disruption from excavation,

grading, or filling activities; changes in topography or surface relief features; erosion of beach sand; or changes in existing siltation rates are anticipated from the implementation of the proposed project.

**VII. c)** Because no heavy construction activities to construct new structures would be required, no excavation, grading, or filling activities would be required to comply with the proposed project. Because no new structures would be built that could be affected by subsidence, subsidence is not anticipated to be a problem. Further, the proposed project would not require the drilling or removal of underground products (e.g., water, crude oil, etc.) that could produce subsidence effects. Because no groundwork or earth moving activities would be required as part of implementing PAR 1168, no new landslides effects or other changes to unique geologic features would occur.

**VII. d) & e)** Since PAR 1168 is not expected to require the installation of control equipment or the construction of any structures that would involve earth-moving activities, no persons or property would be exposed to new impacts from expansive soils or soils. Further, because PAR 1168 does not require construction of any structures that require wastewater disposal, the installation of septic tanks or other alternative waste water disposal systems is not anticipated as a result of adopting PAR 1168.

Based upon these considerations, significant adverse geology and soil impacts are not anticipated and, therefore, no further analysis is required. Because no significant adverse geology and soil impacts were identified, no mitigation measures are necessary. Therefore, this topic will not need to be evaluated further in the Draft EA.

	<b>Potentially Significant Impact</b>	<b>Less Than Significant With Mitigation</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
<b>VIII. HAZARDS AND HAZARDOUS MATERIALS.</b> Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, and disposal of hazardous materials?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset conditions involving the release of hazardous materials into the environment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
c) Emit hazardous emissions, or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public use airport or a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h) Significantly increased fire hazard in areas with flammable materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### Significance Criteria

Impacts associated with hazards will be considered significant if any of the following occur:

- Non-compliance with any applicable design code or regulation.
- Non-conformance to National Fire Protection Association standards.
- Non-conformance to regulations or generally accepted industry practices related to operating policy and procedures concerning the design, construction, security, leak detection, spill containment or fire protection.
- Exposure to hazardous chemicals in concentrations equal to or greater than the Emergency Response Planning Guideline (ERPG) 2 levels.

**Discussion**

**VIII. a), b) & c)** PAR 1168 does not include provisions that would directly or indirectly dictate the use of any specific adhesive or sealant formulations with the exception of prohibiting Group II exempt solvents, which are, or are potentially toxic or ozone-depleting compounds. Prohibiting the use of Group II exempt compounds is a beneficial effect because it would reduce the potential for exposures to toxic or potentially toxic compounds by the general public. Persons who currently use adhesives and solvents would continue to have the flexibility of choosing the product formulation best suited for their needs.

Potential solvents used in reformulations of adhesives and sealants to comply with PAR 1168 include:

**Acetone**

Acetone is a colorless, highly volatile liquid that has a fragrant, mint-like odor. It is a manufactured chemical that is also found naturally in the environment. It occurs naturally in plants, trees, volcanic gases, forest fires, and as a product of the breakdown of body fat. It is present in vehicle exhaust, tobacco smoke, and landfill sites. Acetone is used to make plastic, fibers, drugs, and other chemicals. It is also used to dissolve other substances. Industrial processes contribute more acetone to the environment than natural processes. Common uses for acetone are nail polish removers and for thinning paint. It has a high solvent strength greater than the other types of solvents, except for xylene, which has a similar solvent strength. Acetone is widely available at retail stores that sell solvents.

1. As a VOC: Acetone is currently listed as a Group I exempt VOC pursuant to SCAQMD Rule 102 – Definition of Terms, because it does not contribute appreciably to ozone formation. Acetone was originally “delisted” as a VOC by the EPA in 1995.
2. Flammability: Acetone has the lowest flash point, -4 °F (below freezing), and is the most flammable of all the solvents considered in PAR 1143. Acetone, along with the majority of the other solvents except for PCBTF, is rated “three” for flammability by the NFPA which means that it is considered to be highly flammable. However, because of the ultra-low flash point, labeling requirements pursuant to the CPSC classifies acetone as “extremely flammable.”

**Dimethyl Carbonate**

DMC is a colorless liquid with an ester or alcohol like odor. It is classified as a carbonate ester. DMC is used as a carbonylating and methylating agent, a fuel additive, a solvent in lithium ion batteries, and a solvent in coatings and paints. DMC is manufactured in Asia and Europe.

1. As a VOC: Exempt pursuant to EPA.
2. Flammability: DMC, has a flash point at 63°F (within ambient temperatures) DMC is rated “three” for flammability by the NFPA which means that it is considered to be highly flammable.

**PCBTF (parachlorobenzotrifluoride)**

PCBTF is a colorless liquid with a distinct aromatic odor. It is commonly used as an inks solvent in the printing industry and is sold under the brand name Oxsol 100. PCBTF had originally been used as an intermediate in the production of other compounds, but more recently has been marketed as a cleaning solvent and paint thinner. Because it is only manufactured in a limited number of countries overseas (e.g., China), it is considered to be expensive due to high shipping costs relative to other possible solvent replacements.

1. As a VOC: Exempt pursuant to EPA and listed as exempt in Rule 102, class I.
2. Flammability: PCBTF, like mineral spirits, has a relatively high flash point at 109 °F (well above typical ambient temperatures) when compared to acetone, and as such, is one of the least flammable of all the solvents considered in Rule 1168. PCBTF, is the only solvent that is rated “one” for flammability by the NFPA which means that it is considered to be slightly flammable or combustible if heated. Because of its high flashpoint range, labeling requirements pursuant to the CPSC classifies PCBTF as “combustible.”

**TBAc (tertiary butyl acetate)**

TBAc is a colorless liquid with a distinct aromatic odor. It is commonly used as lacquers, enamels, inks, adhesives, thinners and industrial cleaners. It is manufactured from acetic acid and isobutylene. <sup>1</sup>

As a VOC: Exempt pursuant to EPA and listed as VOC exempt in Rule 1151 for motor vehicle mobile equipment nonassembly line coating operations coatings other than color coatings and clear coating, and in Rule 1113 when used in industrial maintenance coatings.

3. Flammability: tBAC, like mineral spirits, has a relatively low flash point at 40°F, but higher than acetone. Like acetone, tBAc is rated “three” for flammability by the NFPA which means that it is considered to be highly flammable.

TBAc and DMC would be exempted as a VOC for roofing products under PAR 11168 have health risk values and along with other exempt solvents such as acetone may have flammability concerns if used in larger quantities as a result of PAR 1168. Because the amount of these solvents used in formulations for PAR 1168 compliant products are not known at this time, hazards from routine transport, use and disposal of hazardous materials; and hazards from reasonable foreseeable upset conditions will be evaluated in the Draft EA.

**VIII. d)** Government Code §65962.5 typically refers to a list of facilities that may be subject to Resource Conservation and Recovery Act (RCRA) permits. Since PAR 1168 relates to adhesives and sealants, it is not expected to have direct impacts on facilities affected by Government Code §65962.5. Facilities affected by Government Code §65962.5 would still need to comply with any regulations relating to that code section. The use of PAR 1168 compliant products is not expected to interfere with existing hazardous waste management programs. Affected facilities would be expected to continue to manage any and all hazardous materials and hazardous waste, in accordance with federal, state and local regulations. Accordingly, PAR 1168 is not expected to result in a new significant impact to the public or environment from sites on lists compiled pursuant to Government Code §65962.5.

**VIII. e)** Because PAR 1168 is only expected to result in the reformulation of affected adhesives and solvents, it is not expected to increase or create any new safety hazards to people working or residing in the vicinity of public/private airports.

**VIII. f)** PAR 1168 is only expected to result in the reformulation of affected adhesives and solvents. Further, PAR 1168 compliant products are expected to be manufactured, transported, stored and applied in the same quantities as existing affected products. As a result, PAR 1168 is not expected to conflict with business emergency response plans. With respect to suppliers and sellers of affected products, Health and Safety Code §25506 specifically requires all businesses handling hazardous materials to submit a business emergency response plan to assist local

administering agencies in the emergency release or threatened release of a hazardous material. Business emergency response plans generally require the following:

1. Identification of individuals who are responsible for various actions, including reporting, assisting emergency response personnel and establishing an emergency response team;
2. Procedures to notify the administering agency, the appropriate local emergency rescue personnel, and the California Office of Emergency Services;
3. Procedures to mitigate a release or threatened release to minimize any potential harm or damage to persons, property or the environment;
4. Procedures to notify the necessary persons who can respond to an emergency within the facility;
5. Details of evacuation plans and procedures;
6. Descriptions of the emergency equipment available in the facility;
7. Identification of local emergency medical assistance; and
8. Training (initial and refresher) programs for employees in:
  - a. The safe handling of hazardous materials used by the business;
  - b. Methods of working with the local public emergency response agencies;
  - c. The use of emergency response resources under control of the handler; and
  - d. Other procedures and resources that will increase public safety and prevent or mitigate a release of hazardous materials.

In general, every county or city and all facilities using a minimum amount of hazardous materials are required to formulate detailed contingency plans to eliminate, or at least minimize, the possibility and effect of fires, explosion, or spills. In conjunction with the California Office of Emergency Services, local jurisdictions have enacted ordinances that set standards for area and business emergency response plans. These requirements include immediate notification, mitigation of an actual or threatened release of a hazardous material, and evacuation of the emergency area. Therefore PAR 1168 is not expected to impair the implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

**VIII. g)** PAR 1168 is only expected to result in the reformulation of affected adhesives and solvents. Adhesives and primers are not typically used in wildlands, but in populated areas, therefore, risk of loss or injury associated with wildland fires is not expected as a result of implementing PAR 1168. Therefore, PAR 1168 is not expected to be significant for exposing people or structures to risk of loss, injury or death involving wildland fires.

**VIII. h)** Lower VOC content limits required by PAR 1168 are expected to be achieved through the use of waterborne or VOC exempt solvents. SCAQMD staff as contacted the California Fire Marshal's Office and county fire departments. Incidences of fires are not indexed with enough detail to determine which fires were caused by coatings, adhesives, sealants or solvents. Therefore, it could not be determined if fires have increased because of the VOC exempt solvents replacement in existing SCAQMD VOC rules. However, a San Bernardino County Fire

employee<sup>5</sup> stated that only two fires in the past thirteen years were determined to be caused by architectural coating operations. In both cases, the fires were caused by combustion of cleaning rags not the actual architectural coating operations. Therefore, fires caused by coatings, adhesives, sealants and solvents are rare. Reformulation with VOC exempt solvents related to amendments to SCAQMD Rules 102, 1113, 1151, and 1143 since 2005, which is a subset of the time period identified by the San Bernardino County Fire.

Therefore, while the reformulation of adhesive and sealants with acetone, DMC and tBAC may result in increased flammability of affected products, additional fires are not expected, since these events are rare for coatings, adhesives, sealants and solvents and have not increased even during the period were VOC exempt solvents replacement occurred in other SCAQMD rules.

Based upon these considerations, adverse hazards and hazardous materials impacts may be anticipated, and depending on the formulation used by the manufacturer, this topic will be evaluated further in the Draft EA.

	<b>Potentially Significant Impact</b>	<b>Less Than Significant With Mitigation</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
<b>IX. HYDROLOGY AND WATER QUALITY. Would the project:</b>				
a) Violate any water quality standards, waste discharge requirements, exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board, or otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g. the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

<sup>5</sup> Telephone conversion with San Bernardino County Fire Department Public Information Unit on December 6, 2013.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
c) Substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in substantial erosion or siltation on- or off-site or flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Place housing or other structures within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map, which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam, or inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Require or result in the construction of new water or wastewater treatment facilities or new storm water drainage facilities, or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
i) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Significance Criteria**

Potential impacts on water resources will be considered significant if any of the following criteria apply:

Water Demand:

- The existing water supply does not have the capacity to meet the increased demands of the project, or the project would use more than 262,820 gallons per day of potable water.
- The project increases demand for total water by more than five million gallons per day.

Water Quality:

- The project will cause degradation or depletion of ground water resources substantially affecting current or future uses.
- The project will cause the degradation of surface water substantially affecting current or future uses.
- The project will result in a violation of National Pollutant Discharge Elimination System (NPDES) permit requirements.
- The capacities of existing or proposed wastewater treatment facilities and the sanitary sewer system are not sufficient to meet the needs of the project.
- The project results in substantial increases in the area of impervious surfaces, such that interference with groundwater recharge efforts occurs.
- The project results in alterations to the course or flow of floodwaters.

**Discussion**

**IX. a)** To evaluate potential water quality impacts from PAR 1168, it is assumed that future compliant adhesives and sealants would be formulated primarily with waterborne technologies. As a result, more water would be used for clean-up and the resultant wastewater material could be disposed of into the public sewer system. It is anticipated that current application equipment (i.e., aerosol cans, spray guns, rollers, and brushes) clean-up practices of using water would continue into the future.

State and federal regulations promote the development and use of adhesives and solvents formulated with non-hazardous solvents. Therefore, wastewater which may be generated from reformulated adhesives and solvents is expected to contain less hazardous materials than the wastewater generated for solvent-based adhesive and sealant operations, thereby potentially reducing toxic influent to the POTWs. It is not expected that tBac and DMC roofing adhesives would be thinned or cleaned with water; therefore, these uses are not expected to affect POTWs.

PAR 1168 is expected to result in the increased use of tBAC and DMC in roofing products, and acetone or PCBTF in other affected products. Adhesives and sealants formulated with tBAC and DMC are solvent based and therefore, not expected to be cleaned with water and disposed of as hazardous waste. Therefore, any impacts to water quality would be from waterborne adhesives and sealants. Also, PAR 1168 enhanced the requirement to comply with cleaning and disposing of solvents pursuant to SCAQMD Rule 1171 (see PAR 1168 (c)(3)).

Changes to VOC content limits in PAR 1168 would be made to adhesives and sealants related to architectural and manufacturing uses. Results from a survey of contractors for amendments to the architectural coatings rule (Rule 1113) determined that a majority either dispose of the waste material properly as required by the coating manufacturer's MSDS or recycle the waste material regardless of type of coating.<sup>6</sup> The survey was prepared to evaluate the reformulation of solvent based coatings with waterborne coatings. Based upon these results, there is no reason to expect that adhesive and sealant users would change their disposal practices, especially those that dispose of wastes properly, with the implementation of PAR 1168. Similarly, there is also no evidence that illegal disposal practices would increase as a result of implementing PAR 1168.

Since the proposed project is not expected to generate significant adverse water quality impacts industry-wide, no changes to existing wastewater treatment permits at affected coating manufacturing facilities are expected to be necessary. As a result, it is expected that operators of affected facilities would continue to comply with existing wastewater treatment requirements of the applicable Regional Water Quality Control Boards or sanitation districts.

**IX. b) g), h), & i)** There is a potential water demand to reformulate adhesives and sealants into waterborne adhesives and sealants and to clean up waterborne adhesives and sealants, however, historically this has not resulted in a significant adverse impact on water demand or depleted groundwater supplies. The AQMP estimated that 3.18 tons of VOC emissions per year were emitted by solvent based adhesives and sealants. This emission estimate is based on the assumption that all VOCs in adhesives and sealants are emitted. The most conservative assumption for water use would be that all VOC solvents in adhesives and sealants are replaced by waterborne adhesives and sealants. Existing solvents are typically ethylene glycol or stoddard solvent. Assuming an average density 7.85 pounds per gallon for the solvent in existing adhesives and sealants based on the densities of ethylene glycol (9.3 pounds per gallon) and stoddard solvent (6.4 pounds per gallon), results in approximately 810 gallons of solvent used per year (3.18 ton/year x 2,000 lb/ton x gal/7.85 lb). Assuming that an equivalent amount of water may be used for cleaning, 1,622 gallons of water per year (810 gallons in adhesive or sealant/year + 810 gallons of water for cleaning/year) may be consumed if all solvent based adhesives and sealants are replaced by waterborne adhesives and sealants. This is less than the 262,820 gallons per day of potable water significant threshold and the five million gallons of water per day significant threshold. Therefore, PAR 1168 is not expected to be significant for water demand or depleted ground water supplies. Sufficient water supplies will be available to

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<sup>6</sup> SCAQMD, Final Subsequent Environmental Assessment, SCAQMD No. 960626DWS, October 1996. Contractor survey prepared by SCAQMD staff for the November 1996 amendments to Rule 1113. In November 2008, a paint manufacturer conducted a survey of 180 Southern California residential and professional painters. The conclusion was that a majority professional painters use hazardous waste disposal service to dispose of coatings instead of air drying coatings, and then disposing of as a solid waste.

serve the proposed project from existing entitlements and resources, so new or expanded wastewater treatment facilities will not be necessary.

In addition, because the water use is less than the potable water and total water use thresholds, PAR 1168 is not expected to require or result in the construction of new water or wastewater treatment facilities or new storm water drainage facilities, or expansion of existing facilities, the construction of which could cause significant environmental effects; and there would be adequate capacity to serve the project's projected demand in addition to the wastewater treatment provider's existing commitments

**IX. c) & d)** The proposed project would not change current adhesives and sealants manufacturing or adhesives and sealants application or practices. Consequently, no major construction activities or operational modifications would be necessary to comply with PAR 1168. As a result, the proposed project would not require site preparation, heavy-duty construction activities, or operational practices that could alter any existing drainage patterns or increase the rate or amount of surface runoff water that would exceed the capacity of existing or planned stormwater drainage systems.

Manufacturing and application of affected product is expected to take place at existing settings. Manufacturing of affected product occurs within enclosed processes, so it does not result in drainage or surface runoff. Affected product is required to be disposed of properly, which does not result in drainage or surface runoff. PAR 1168 reformulated products are expected to be manufactured within enclosed processes and disposed of properly, which does not result in drainage or surface runoff. As a result, the proposed project would not result in operational activities that could alter any existing drainage patterns or increase the rate or amount of surface runoff water that would exceed the capacity of existing or planned stormwater drainage systems.

**IX. e)** Because PAR 1168 does not require construction of any new structures, because product manufacturing and application is expected to take place at existing locations, it would not result in placing housing or other structures in a 100-year flood hazard area. In addition, as discussion under XIII. Population and Housing, the proposed project does not warrant the need for additional workers or housing. Therefore, any flood hazards would be part of the existing setting or would be present for reasons unrelated to PAR 1168.

**IX. f)** Since PAR 1168 does not require construction of new facilities, it would not alter existing flood risks or risks from seiches, tsunamis or mudflow conditions.

Based upon these considerations, significant adverse hydrology and water quality impacts are not anticipated and, therefore, no further analysis is required. Because no significant adverse hydrology and water quality impacts were identified, no mitigation measures are necessary. Therefore, this topic will not need to be evaluated further in the Draft EA.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
<b>X. LAND USE AND PLANNING.</b>				
Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Significance Criteria**

Land use and planning impacts will be considered significant if the project conflicts with the land use and zoning designations established by local jurisdictions.

**Discussion**

**X. a)** It is expected that compliance with PAR 1168 would be achieved primarily through reformulating existing adhesives and sealants with low VOC formulations that will not require new or altered land use activity. Manufacturing and applying compliant adhesives and sealants does not require building new structures, installing new equipment, constructing or installing any air pollution control equipment or structures. Therefore, it would not result in physically dividing an established community.

**X. b)** It is expected that compliance with PAR 1168 would be achieved primarily through reformulating existing adhesives and sealants with low VOC formulations that will not require new or altered land use activity. Therefore, there are no provisions in PAR 1168 that would require or affect land use plans, policies, or regulations. Land use and other planning considerations are determined by local governments and no land use or planning requirements would be altered by PAR 1168 requirements.

Based upon these considerations, significant adverse land use and planning impacts are not anticipated and, therefore, no further analysis is required. Because no significant adverse land use and planning impacts were identified, no mitigation measures are necessary. Therefore, this topic will not need to be evaluated further in the Draft EA.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
<b>XI. MINERAL RESOURCES.</b> Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Significance Criteria**

Project-related impacts on mineral resources will be considered significant if any of the following conditions are met:

- The project would result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.
- The proposed project results in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

**Discussion**

**XI. a) & b)** There are no provisions in PAR 1168 that would result in the loss of availability of a known mineral resource of value to the region and the residents of the state, or of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan. Some examples of mineral resources are gravel, asphalt, bauxite, and gypsum, which are commonly used for construction activities or industrial processes. Since the proposed project is likely only to result in the reformulation of adhesives and sealants, PAR 1168 would have no effects on the use of important minerals, such as those described above. Therefore, no new demand for mineral resources is expected to occur and significant adverse mineral resources impacts from implementing PAR 1168 are not anticipated.

Therefore, the proposed project is not expected to result in the loss of availability of a known mineral resource of value to the region and the residents of the state such as aggregate, coal, clay, shale, et cetera, or of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

Based upon these considerations, significant adverse mineral resources are not anticipated and, therefore, no further analysis is required. Because no significant adverse mineral resources were identified, no mitigation measures are necessary. Therefore, this topic will not need to be evaluated further in the Draft EA.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
<b>XII. NOISE.</b> Would the project result in:				
a) Exposure of persons to or generation of permanent noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public use airport or private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Significance Criteria

Impacts on noise will be considered significant if:

- Construction noise levels exceed the local noise ordinances or, if the noise threshold is currently exceeded, project noise sources increase ambient noise levels by more than three decibels (dBA) at the site boundary. Construction noise levels will be considered significant if they exceed federal Occupational Safety and Health Administration (OSHA) noise standards for workers.
- The proposed project operational noise levels exceed any of the local noise ordinances at the site boundary or, if the noise threshold is currently exceeded, project noise sources increase ambient noise levels by more than three dBA at the site boundary.

### Discussion

**XII. a)** Lowering the VOC content limit of adhesives and solvents and prohibiting the use of Group II exempt solvents in excess of 0.1 percent by weight of adhesives and solvents is not expected to alter adhesives and solvents manufacturing, distribution or application in any substantial way. The manufacture of PAR 1168 compliant adhesives and solvents is not expected to require physical modifications that would require additional noise-causing heavy-duty diesel-fueled construction activities at existing facilities, because it is anticipated that the same equipment used to manufacture and apply currently available adhesives and solvents could be used to manufacture and apply PAR 1168 compliant adhesives and solvents.

For these reasons, PAR 1168 is not expected to expose persons to the permanent generation of excessive noise levels above current facility levels. Further, the use of these adhesives and

solvents subject to PAR 1168 at the consumer level would occur using the same types of application equipment (e.g., brushes, rollers or sprayguns). Therefore, as a result of implementing PAR 1168, the existing noise levels are unlikely to increase in the vicinities of the existing facilities or other sites where these products are distributed, sold or used to a level exceeding any applicable significance thresholds.

**XII. b)** PAR 1168 is not anticipated to expose persons to or generate excessive groundborne vibration or groundborne noise levels beyond existing setting result of implementing lower VOC content limits under PAR 1168. In addition, the proposed amended rule does not require the installation of control equipment that would generate vibrations and noise.

**XII. c)** No increase in periodic or temporary ambient noise levels in the vicinity of affected facilities above levels existing prior to implementing PAR 1168 is anticipated because the proposed project would not require heavy-duty diesel-fueled construction-related activities nor would it change the existing activities currently performed by persons who use and apply adhesives and solvents. See also the response to items XII.a) and XII.b).

**XII. d)** Implementation of PAR 1168 would not affect existing practices by persons who use and apply PAR 1168 adhesives and solvents (See discussions in items XII.a) and XII.b)). Even if affected sites where PAR 1168 compliant adhesives and solvents are used are located near public/private airports, no new noise impacts would be expected since the application of adhesives and solvents is not typically a noise intensive activity. Thus, PAR 1168 is not expected to expose persons residing or working in the vicinity of public or private airports to excessive noise levels.

Based upon these considerations, significant adverse noise impacts are not anticipated and, therefore, no further analysis is required. Because no significant adverse noise impacts were identified, no mitigation measures are necessary. Therefore, this topic will not need to be evaluated further in the Draft EA.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
<b>XIII. POPULATION AND HOUSING.</b>				
Would the project:				
a) Induce substantial growth in an area either directly (for example, by proposing new homes and businesses) or indirectly (e.g. through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of people or existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### **Significance Criteria**

Impacts of the proposed project on population and housing will be considered significant if the following criteria are exceeded:

- The demand for temporary or permanent housing exceeds the existing supply.
- The proposed project produces additional population, housing or employment inconsistent with adopted plans either in terms of overall amount or location.

### **Discussion**

**XIII. a)** The proposed project is not anticipated to generate any significant effects, either direct or indirect, on the district's population or population distribution as no additional workers are anticipated to be required to comply with PAR 1168. No additional workers would be required to manufacture PAR 1168 compliant adhesives or sealants as the same equipment that is currently used would continue to be used. In addition, PAR 1168 is not expected to expand the usage amount of the affective adhesives or solvents, so no additional workers are expected to be need to apply the affected products. Human population within the jurisdiction of the SCAQMD is anticipated to grow regardless of implementing PAR 1168. As such, PAR 1168 would not cause changes in population densities or induce significant growth in population.

**XIII .b)** The proposed project would likely only result in reformulation of adhesives or sealants. As such, PAR 1168 is not expected to substantially alter existing operations where adhesives or sealants may be manufactured or used (see discussion in item XIII.a)). Consequently, PAR 1168 is not expected to result in the creation of any industry that would affect population growth, directly or indirectly induce the construction of single- or multiple-family units, or require the displacement of persons or housing elsewhere in the district.

Based upon these considerations, significant adverse population and housing impacts are not anticipated and, therefore, no further analysis is required. Because no significant adverse population and housing impacts were identified, no mitigation measures are necessary. Therefore, this topic will not need to be evaluated further in the Draft EA.

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	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
<b>XIV. PUBLIC SERVICES.</b> Would the proposal result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:				
a) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Significance Criteria

Impacts on public services will be considered significant if the project results in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response time or other performance objectives.

### Discussion

**XIV. a)** Potential adverse impacts to fire departments could occur in two ways: 1) if there is an increase in accidental release of hazardous materials (e.g, acetone, DMC, tBAc etc.) used in compliant adhesives and sealants, fire departments would have to respond more frequently to accidental release incidences; and, 2) if there is an increase in the amount of hazardous materials or flammable materials stored (e.g, acetone, DMC, tBAc etc.) at affected facilities, fire departments may have to conduct additional safety inspections. 1) Lower VOC content limits required by PAR 1168 are expected to be achieved through the use of waterborne or VOC exempt solvents. SCAQMD staff as contacted the California Fire Marshal's Office and county fire departments. Incidences of fires are not indexed with enough detail to determine which fires were caused by coatings, adhesives, sealants or solvents. Therefore, it could not be determined if fires have increased because of the VOC exempt solvents replacement in existing SCAQMD VOC rules. However, a San Bernardino County Fire employee<sup>7</sup> stated that only two fires in the past thirteen years were determined to be caused by architectural coating operations. In both cases, the fires were caused by combustion of cleaning rags not the actual architectural coating operations. Therefore, fires caused by coatings, adhesives, sealants and solvents are rare.

<sup>7</sup> Telephone conversion with San Bernardino County Fire Department Public Information Unit on December 6, 2013.

Reformulation with VOC exempt solvents related to amendments to SCAQMD Rules 102, 1113, 1151, and 1143 since 2005, which is a subset of the time period identified by the San Bernardino County Fire.

Therefore, while the reformulation of adhesive and sealants with acetone, DMC and tBAC may result in increased flammability of affected products, fire departments are not expected to have to respond more frequently to accidental releases, since these events are rare even for coatings, adhesives, sealants and solvents and have not increased even during the period were VOC exempt solvents replacement occurred in other SCAQMD rules.

2) PAR 1168 is expected to result in the reformulation of existing adhesives or sealants with VOC exempt solvents or waterborne. PAR 1168 is not expected to alter the amount of adhesives or sealants used in the district. Therefore, PAR 1168 is not expected to increase the amount of hazardous materials or flammable materials stored at affected facilities, which would require significant additional safety inspections. Therefore, PAR 1168 is not expected to generate potential adverse impacts to fire departments.

**XIV. b)** Local police departments are also first responders to emergency situations such as fires, for example, to cordon off the area and provide crowd control. Implementing PAR 1163 is not expected to increase the number of fires compared to the existing setting. As a result, no significant adverse impacts to local police departments are expected because no increases in fire emergencies are anticipated, and will not be further analyzed in the Draft EA.

**XIV. c)** The local labor pool (e.g., workforce) of employees, contractors or consumers who work at existing adhesive and sealant manufacturing facilities, work at retail locations that sell affected adhesives and solvents, or use adhesives and sealants in their day-to-day activities is expected to remain the same since PAR 1168 would not trigger substantial changes to current manufacturing or usage practices. Therefore, with no increase in local population anticipated (see discussion “XIII. Population and Housing”), construction of new or additional demands on existing schools are not anticipated. Therefore, no significant adverse impacts are expected to local schools.

**XIV. d)** PAR 1168 would not result in the need for new or physically altered facilities, in order to maintain acceptable service ratios. As noted in other sections, PAR 1168 is not expected to require the use of equipment or processes that handle or use hazardous or flammable material that would require public agency oversight or affect in any way public agency service ratios, response times or other performance objectives. Further, there would be no increase in population and, therefore, no need for physically altered government facilities.

Based upon these considerations, significant adverse public services impacts are not anticipated and, therefore, no further analysis is required. Because no significant adverse public services impacts were identified, no mitigation measures are necessary. Therefore, this topic will not need to be evaluated further in the Draft EA.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
<b>XV. RECREATION.</b>				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment or recreational services?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Significance Criteria**

Impacts to recreation will be considered significant if:

- The project results in an increased demand for neighborhood or regional parks or other recreational facilities.
- The project adversely affects existing recreational opportunities.

**Discussion**

**XV. a) & b)** Land use and other planning considerations are determined by local governments. The adoption of PAR 1168 would only affect the manufacture, sale and use of adhesives and sealants. As discussed under “Land Use and Planning” above, there are no provisions in PAR 1168 that would affect land use plans, policies, or regulations, because the proposed project would not require or affect land use activity. Further, PAR 1168 would not affect in any way district population growth or distribution (see Section XIII), in ways that could increase the demand for or use of existing neighborhood and regional parks or other recreational facilities or require the construction of new or expansion of existing recreational facilities that might have an adverse physical effect on the environment because it would not directly or indirectly increase or redistribute population.

Based upon the above considerations, significant adverse recreation impacts are not anticipated and, therefore, no further analysis is required. Because no significant adverse recreation impacts were identified, no mitigation measures are necessary. Therefore, this topic will not need to be evaluated further in the Draft EA.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
<b>XVI. SOLID/HAZARDOUS WASTE.</b>				
Would the project:				
a) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Comply with federal, state, and local statutes and regulations related to solid and hazardous waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Significance Criteria**

The proposed project impacts on solid/hazardous waste will be considered significant if the following occurs:

- The generation and disposal of hazardous and non-hazardous waste exceeds the capacity of designated landfills.

**Discussion**

**XVI. a) & b)** Any liquid wastes generated by PAR 1168 are discussed in the “Hydrology and Water Quality” discussion as it is prohibited to dispose of liquid wastes in landfills. PAR 1168 is not expected to increase the amount of solid waste used in manufacturing of PAR 1168 compliant adhesives and sealants, since existing adhesives and sealants manufacturing and operations are not expected to change. The same existing equipment is expected to be used in compliant adhesives and sealants, and the only change might be a reduction in the amount of solvents in existing adhesives and solvents. Based upon these considerations, PAR 1168 is not expected to increase the volume of solid or hazardous wastes that cannot be handled by existing municipal or hazardous waste disposal facilities, or require additional waste disposal capacity.

Further, implementing PAR 1168 is not expected to interfere with any affected distributors’ or retailers’ ability to comply with applicable local, state, or federal waste disposal regulations. Based upon these considerations, significant adverse solid/hazardous waste impacts are not anticipated and, therefore, no further analysis is required. Because no significant adverse solid/hazardous waste impacts were identified, no mitigation measures are necessary. Therefore, this topic will not need to be evaluated further in the Draft EA.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
<b>XVII. TRANSPORTATION/TRAFFIC.</b>				
Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### **Significance Criteria**

Impacts on transportation/traffic will be considered significant if any of the following criteria apply:

- Peak period levels on major arterials are disrupted to a point where level of service (LOS) is reduced to D, E or F for more than one month.
- An intersection's volume to capacity ratio increase by 0.02 (two percent) or more when the LOS is already D, E or F.
- A major roadway is closed to all through traffic, and no alternate route is available.
- The project conflicts with applicable policies, plans or programs establishing measures of effectiveness, thereby decreasing the performance or safety of any mode of transportation.
- There is an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system.
- The demand for parking facilities is substantially increased.
- Water borne, rail car or air traffic is substantially altered.
- Traffic hazards to motor vehicles, bicyclists or pedestrians are substantially increased.
- The need for more than 350 employees
- An increase in heavy-duty transport truck traffic to and/or from the facility by more than 350 truck round trips per day
- Increase customer traffic by more than 700 visits per day.

### **Discussion**

**XVII. a) & b)** The manufacture or use of PAR 1168 compliant adhesives and sealants is not expected to adversely affect transportation or traffic. In general, the volumes of PAR 1168 compliant adhesives and sealants are not expected to increase when compared to the volumes of materials currently used. Thus, the current level of transportation demands related to transporting new formulations of materials is not expected to increase. PAR 1168 is not expected to affect existing uses and applications of adhesives and sealants that would change or cause additional worker trips to distribution or retail facilities or increase transportation demands or services. Because no substantial increase in operational-related trips are anticipated, implementing PAR 1168 is not expected to significantly adversely affect circulation patterns on local roadways or the level of service at intersections near affected facilities or other sites that use these products.

**XVII. c)** The height and appearance of the existing structures where compliant adhesives and sealants would be manufactured or used is not expected to be affected by complying with PAR 1168. In addition, implementation of PAR 1168 is not expected to require construction of structures that have the potential to adversely affect air traffic patterns or result in substantial safety risk. Further, PAR 1168 would not affect in any way air traffic in the region because, adhesives and sealants are typically shipped via ground transportation and not by air.

**XVII. d)** Manufacturing and use of compliant adhesives and sealants is not expected to require construction of structures or roadways. Further, implementing PAR 1168 would not involve modifications to existing roadways. Consequently, implementing the proposed project would not create roadway hazards or incompatible roadway uses.

**XVII. e)** Use of compliant adhesives and sealants is not expected to affect or require changes to emergency access at or in the vicinity of the affected facilities or other sites where compliant adhesives and sealants are used since PAR 1168 would not require construction or physical

modifications to any structure associated with manufacturing or selling PAR 1168 compliant adhesives and sealants. Thus the manufacturing and use of compliant adhesives and sealants are not expected to affect businesses' emergency response plans (see discussion in Section VIII. f). Therefore, PAR 1168 is not expected to adversely affect emergency access.

**XVII. f)** No modifications at facilities or other sites where compliant adhesives and sealants are manufactured, sold or used are expected that would conflict with alternative transportation, such as bus turnouts, bicycle racks, et cetera. Consequently, implementing PAR 1168 would not create any conflicts with these modes of transportation.

Based upon these considerations, significant adverse transportation/traffic impacts are not anticipated and, therefore, no further analysis is required. Because no significant adverse transportation/traffic impacts were identified, no mitigation measures are necessary. Therefore, this topic will not need to be evaluated further in the Draft EA.

	<b>Potentially Significant Impact</b>	<b>Less Than Significant With Mitigation</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
<b>XVIII. MANDATORY FINDINGS OF SIGNIFICANCE.</b>				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Discussion

**XVIII. a)** As discussed in the “Biological Resources” section of this IS, PAR 1168 is not expected to significantly adversely affect plant or animal species or the habitat on which they rely because the proposed project would likely only require the reformulation of adhesives and sealants. PAR 1168 is not expected to require installation of equipment or construction of any structures. Therefore, implementing PAR 1168 is not expected to adversely impact special status plants, animals, natural communities, and important examples of the major periods of California history or prehistory.

**XVIII. b)** Based on the foregoing analyses, some project-specific significant adverse environmental impacts in answers for air quality and hazards and hazardous materials are marked significant for project-specific adverse impacts (see checklists in sections III. and VIII). The incremental effects of the proposed project for air quality and hazards and hazardous materials answers marked potentially significant are not known at this time and will be evaluated for project-specific and cumulative adverse effects in the Draft EA. Therefore, air quality and hazards and hazardous materials answers checked potentially significant for project-specific adverse impacts are potentially significant for cumulative adverse impacts.

No environmental topics were answered ‘Less Than Significant with Mitigation’. The environmental topics with ‘No Impact’ include aesthetics, agriculture and forestry resources, biological resources, cultural resources, geology and soils, land use and planning, mineral resources, noise, population and housing, recreation, solid/hazardous waste, and transportation and traffic (see checklists in sections I., II., IV., V., VII., X., XI., XII., XIII., XV., XVI., and XVII.). The remaining environmental topics (e.g., air quality questions not answered significant, energy, hazards and hazardous materials questions not answered significant, hydrology and water quality, and public services) are answered ‘Less Than Significant Impact’ or ‘No Impact’ (see checklists in sections III., VI., VIII., IX., and XIV.). SCAQMD significant thresholds are the same for project-specific impacts and cumulative impacts; therefore, environmental topic answers that are checked ‘Less Than Significant Impact’ or ‘No Impact’ for project-specific impacts would not be expected to make any contribution to potential cumulative impacts whatsoever. Therefore, environmental topic answered ‘Less Than Significant Impact’ or ‘No Impact’ for project-specific impacts are not expected to be significant for cumulative adverse impacts; therefore, no mitigation is necessary. Therefore, these topics will not be evaluated further in the Draft EA.

**XVIII. c)** Some air quality and hazards and hazardous materials adverse impacts from implementing PAR 1168 were identified as potentially significant and will be evaluated in the Draft EA (see checklists in sections III. and VIII). The direct and indirect adverse effects upon human beings for these potentially significant adverse impacts will be evaluated in the Draft EA.

**APPENDIX A**

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**PROPOSED AMENDED RULE 1168**

(Adopted April 7, 1989)(Amended March 2, 1990)(Amended Feb. 1, 1991)  
(Amended July 19, 1991)(Amended August 2, 1991)  
(Amended December 4, 1992)(Amended December 10, 1993)  
(Amended April 11, 1997)(Amended February 13, 1998)(Amended September 15, 2000)  
(Amended June 7, 2002)(Amended July 12, 2002)(Amended October 3, 2003)  
(Amended January 7, 2005)([Proposed Amended Rule 1168 June 2014](#))

12/12/13

## **PROPOSED AMENDED RULE 1168. ADHESIVE AND SEALANT APPLICATIONS**

### (a) Purpose and Applicability

The purpose of this rule is to reduce emissions of volatile organic compounds (VOCs), ~~and toxic air contaminants, and stratospheric ozone-depleting compounds to eliminate emissions of chloroform, ethylene dichloride, methylene chloride, perchloroethylene, and trichloroethylene~~ from the application of adhesives, ~~adhesive bonding primers~~, adhesive primers, sealants, and sealant primers, ~~or any other primers~~. This rule applies to ~~all commercial and industrial~~ any person who sells, stores, supplies, offers for sale or manufactures for sale any sales and applications of adhesives, ~~adhesive bonding primers~~, adhesive primers, sealants, or sealant primers, ~~or any other primers~~, unless otherwise specifically exempted by this rule. This rule also applies to all use of adhesives, adhesive primers, caulks, sealants or sealant primers excluding consumer uses where the product is less than or equal to one pound or 16 fluid ounces and where there is an applicable VOC limit in the California Air Resources Board Consumer Products Regulation (Title 17 of the California Code of Regulations, Section 94507, et. seq.).

### (b) Definitions

For the purpose of this rule, the following definitions shall apply:

- ~~(1) — ACRYLIC is a thermoplastic polymer or a copolymer of acrylic acid, methacrylic acid, esters of these acids, or acrylonitrile.~~
- (21) ACRYLONITRILE-BUTADIENE-STYRENE (ABS) plastic is made by reacting monomers of acrylonitrile, butadiene, and styrene and is normally identified with an ABS marking.
- (32) ADHESIVE is any substance that is used to bond one surface to another surface by attachment. Adhesive does not include adhesive tape or paper. Adhesives include adhesive bonding primers, adhesive primers, adhesive primers for plastics, and any other primer.

- ~~(4) — ADHESIVE BONDING PRIMER is an adhesive applied to a surface to improve the bond of subsequent adhesives and sometimes to inhibit corrosion.~~
- (53) ADHESIVE PRIMER is a coating film-forming material applied to a substrate, prior to the application of an adhesive, to provide a bonding surface increase adhesion or film bond strength, promote wetting, or form a chemical bond with a subsequently applied adhesive. Adhesive primer includes bonding primers and promoters.
- ~~(4) — ADHESIVE TAPE OR PAPER is a backing material coated with an adhesive and includes drywall tape, heat sensitive tape, pressure sensitive tape and water activated tape.~~
- ~~(6) — ADHESIVE PRIMER FOR PLASTIC is a material applied to a plastic substrate before applying an adhesive in order to obtain better adhesion.~~
- ~~(7) — ADHESIVE PROMOTER is a coating applied to a substrate in a monomolecular thickness to promote wetting and form a chemical bond with the subsequently applied material.~~
- ~~(8) — ADHESIVE SOLID is the nonvolatile portion of an adhesive that remains after heating a sample of the material at 110°C for one hour.~~
- (95) — AEROSOL ADHESIVE means is any adhesive packaged as an aerosol product in which the spray mechanism is permanently housed in a nonrefillable can designed for hand-held application without the need for ancillary hoses or spray equipment. ~~Aerosol adhesives include special purpose spray adhesives, mist spray adhesives, and web spray adhesives, as defined by the California Air Resources Board consumer products regulation found in Title 17 of the California Code of Regulations, beginning at Section 94507.~~
- ~~(10) — AEROSOL SPRAY CAN is a hand held, pressurized, non-refillable container which expels adhesives from the container in a finely divided spray when a valve on the container is depressed.~~
- ~~(11) — AEROSPACE COMPONENT is the fabricated part, assembly of parts, or completed unit of any aircraft or space vehicle (excluding tires), and includes models, mock-ups, prototypes, and test coupons.~~

~~(12) — AIRCRAFT means any machine designed to travel through the air, without leaving the earth's atmosphere, whether heavier or lighter than air, including airplanes, balloons, dirigibles, helicopters, and missiles.~~

~~(13) — AIRCRAFT TIRE REPAIR is the repair and retreading of used tires used on aircraft. This includes the repair of damage to the tire casing, removal of old tread rubber and tread reinforcing materials, and application of new tread and tread reinforcing materials.~~

~~APPURTENANCE accessor to a stationary structure, including, but not limited to: hand railings, cabinets, bathroom and kitchen fixtures, fences, rain-gutters and down spouts, window screens, lamp posts, heating and air conditioning equipment, other mechanical equipment, large fixed stationary tools, signs, motion picture and television production sets, and concrete forms.~~

~~(146) ARCHITECTURAL APPLICATION is the use of a regulated product an adhesive, sealant, or adhesive or sealant primer on stationary structures, including mobile homes, and their appurtenances.~~

~~(7) ARCHITECTURAL APPURTENANCE is any accessory to a stationary structure, including, but not limited to: hand railings, cabinets, bathroom and kitchen fixtures, fences, rain-gutters and down-spouts, window screens, lamp-posts, heating and air conditioning equipment, other mechanical equipment, large fixed stationary tools, signs, motion picture and television production sets, and concrete forms. Appurtenances to an architectural structure include, but are not limited to: hand railings, cabinets, bathroom and kitchen fixtures, fences, rain gutters and downspouts, and windows.~~

~~(15) — ARCHITECTURAL SEALANT OR SEALANT PRIMER is any sealant or sealant primer applied to stationary structures, including mobile homes, and their appurtenances. Appurtenances to an architectural structure include, but are not limited to: hand railings, cabinets, bathroom and kitchen fixtures, fences, rain gutters and downspouts, and windows.~~

~~(8) AUTOMOTIVE GLASS ADHESIVE PRIMER is a primer applied to automotive glass prior to installation of the glass using an adhesive or sealant to improve adhesion to the pinch weld.~~

~~(169) CARPET PAD ADHESIVE is an adhesive used for the installation of a carpet pad (or cushion) beneath a carpet.~~

- (~~1710~~) CERAMIC TILE ADHESIVE is an adhesive used for the installation of ceramic tile products.
- ~~(18) CERAMIC TILES are a ceramic surfacing unit made from clay or a mixture of clay and other materials.~~
- (~~1911~~) CHLORINATED POLYVINYL CHLORIDE (CPVC) plastic is a polymer of the chlorinated polyvinyl monomer that contains 67% chlorine and is normally identified with a CPVC marking.
- ~~(20) COATING SOLID is the nonvolatile portion of a coating that remains after heating a sample of the material at 110°C for one hour.~~
- (~~2112~~) COMPUTER DISKETTE MANUFACTURING is the process where the fold-over flaps are glued to the body of a vinyl jacket.
- (~~2213~~) CONTACT ADHESIVE is an adhesive applied to two separate surfaces, allowed to dry before the two surfaces are placed in contact with each other, and ~~brought together for adhesion and bonding with subsequent pressure~~ forms an immediate bond after both adhesive-coated surfaces are placed in full contact with each other.
- (~~2314~~) COVE BASE ADHESIVE is ~~an adhesive used during the installation of cove base (or wall base), which is generally made of vinyl or rubber, on a wall or vertical surface at floor level~~ a flooring trim unit, generally made of vinyl or rubber, having a concave radius on one edge and a convex radius on the opposite edge that is used in forming a junction between the bottom wall course and the floor to to form an inside corner.
- (~~2415~~) CYANOACRYLATE ADHESIVE is ~~a single-component reactive diluent~~ an acrylic adhesive that contains at least ~~85-95~~ percent by weight ethyl, methyl, methoxymethyl or other functional groupings of cyanoacrylate.
- (~~16~~) DIP COAT is a method of application to a substrate by submersion into and removal from a bath.
- (~~2517~~) DRY WALL ADHESIVE is an adhesive used during the installation of gypsum dry wall to studs or solid surfaces.
- (~~18~~) ELECTROSTATIC APPLICATION is spray method where the atomized droplets are charged and subsequently deposited on the substrate by electrostatic attraction.

- ~~(2619)~~ ENERGY CURABLE ADHESIVES and SEALANTS are single-component reactive products that cure upon exposure to visible-light, ultra-violet light or to an electron beam.
- ~~(20)~~ EXEMPT COMPOUNDS are as defined in Rule 102 and the provisions of (b)(71) VOLATILE ORGANIC COMPOUND (VOC).
- ~~(2721)~~ FACILITY means any permit unit or grouping of permit units or other air contaminant-emitting activities which are located on one or more contiguous properties within the District, in actual physical contact or separated solely by a public roadway or other public right-of-way, and are owned or operated by the same person (or by persons under common control). Such above-described groupings, if not contiguous, but connected only by land carrying a pipeline, shall not be considered one facility.
- ~~(2822)~~ FIBERGLASS is fine filaments of glass.
- ~~(23)~~ FLOW COAT is an application method that coats an object by flowing a stream of regulated product over the object and draining off any excess product.
- ~~(29)~~ ~~FOAM is a rigid or spongy cellular mass with gas bubbles dispersed throughout.~~ (24) FOAM SEALANT is a foam used to fill and form a durable, airtight, water-resistant seal to common building substrates such as wood, brick, concrete, foam board and plastics. Foam sealant includes insulating foam.
- ~~(30)~~ ~~GLUE is a hard gelatin obtained from hides, tendons, cartilage, bones, or other parts of animals.~~
- ~~(3125)~~ GRAMS OF VOC PER LITER OF REGULATED ADHESIVE OR SEALANT PRODUCT, LESS WATER AND LESS EXEMPT COMPOUNDS is the weight of VOC per combined volume of VOC and adhesive or sealant product solids, and can be calculated by the following equation:

Grams of VOC per Liter of Regulated Adhesive or Sealant Product, Less Water and Less

$$\text{Exempt Compounds} = \frac{W_s - W_w - W_{es}}{V_m - V_w - V_{es}}$$

Where:  $W_s$  = weight of volatile compounds, in grams  
 $W_w$  = weight of water, in grams

- $W_{es}$  = weight of exempt compounds, in grams
- $V_m$  = volume of material, in liters
- $V_w$  = volume of water, in liters
- $V_{es}$  = volume of exempt compounds, in liters

For ~~regulated adhesives or sealants~~ products that contain reactive diluents, the VOC content of the ~~adhesive or sealant~~ product is determined after curing. The grams of VOC per liter of any ~~regulated adhesive or sealant~~ product, except a low solids ~~adhesive or sealant~~ product shall be calculated by the following equation:

Grams of VOC per Liter of ~~Regulated Adhesive or Sealant~~ Product, Less Water and Less

$$\text{Exempt Compounds} = \frac{W_{rs} - W_{rw} - W_{res}}{V_m - V_{rw} - V_{res}}$$

- Where:  $W_{rs}$  = weight of volatile compounds not consumed during curing, in grams
- $W_{rw}$  = weight of water not consumed during curing, in grams
- $W_{res}$  = weight of exempt compounds not consumed during curing, in grams
- $V_m$  = volume of material prior to reaction, in liters
- $V_{rw}$  = volume of water not consumed during curing, in liters
- $V_{res}$  = volume of exempt compounds not consumed during curing, in liters

(~~3226~~) GRAMS OF VOC PER LITER OF MATERIAL is the weight of VOC per volume of material, to be used for a low-solids ~~regulated adhesive or sealant~~ product, and can be calculated by the following equation:

$$\text{Grams of VOC per Liter of Material} = \frac{W_s - W_w - W_{es}}{V_m}$$

- Where:  $W_s$  = weight of volatile compounds, in grams
- $W_w$  = weight of water, in grams
- $W_{es}$  = weight of exempt compounds, in grams
- $V_m$  = volume of material, in liters

- (~~33~~27) HAND APPLICATION METHODS is the application of an regulated adhesive or sealant product using by manually hand held equipment. Such equipment includes paint brush, hand roller, trowel, spatula, dauber, rag, sponges, and mechanically- and/or pneumatic-driven syringes ~~without provided there is no~~ atomization of the materials.
- (~~34~~28) HIGH-VOLUME, LOW-PRESSURE (HVLP) SPRAY is equipment used to spray apply a regulated product coating by means of a spray gun that is designed to be operated and that is that operates d between 0.1 and 10 pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns.
- (~~35~~29) INDOOR FLOORING ADHESIVE is an adhesive used during the installation of a carpet indoor flooring that is in an enclosure and is not exposed to ambient weather conditions during normal use.
- (~~30~~) INSULATING FOAM is polymer-containing material injected into wall cavities to provide thermal resistance and sound reduction.
- (~~36~~) ~~LIGHT CURABLE ADHESIVES and SEALANTS are single component reactive adhesives and sealants that cure upon exposure to visible light, ultra violet light or to an electron beam.~~
- (~~37~~31) LOW-SOLIDS ~~ADHESIVE~~ is any regulated adhesive product that contains which has less than one pound of solids per gallon of material (or 120 grams or less of solids per liter of material).
- (~~38~~) ~~LOW SOLIDS ADHESIVE PRIMER is an adhesive primer which has less than one pound of solids per gallon of material (or 120 grams of solids per liter of material).~~
- (~~32~~) MANUFACTURING is the use of tools and labor to make things for sale.
- (~~33~~) MARINE APPURTENANCE is a wood boardwalk, deck, dock, fender, lock gate or other wooden structure specified for the marine environment.
- (~~39~~34) MARINE DECK SEALANT is any sealant that is to be applied to wooden marine decks and their appurtenances and is specified for the marine environment.
- (~~40~~35) MARINE DECK SEALANT PRIMER is any sealant primer that is to be applied to wooden marine decks and their appurtenances and is specified for the marine environment.
- (~~41~~) ~~MODIFIED BITUMINOUS PRIMER consist of bituminous materials, and a high flash solvent used to prepare a surface by (1) improving the~~

~~adhesion and (2) absorbing dust from the surface for adhesive, or flashing cement bitumen membrane.~~

~~(42) — MODIFIED BITUMINOUS MATERIALS are materials obtained from natural deposit of asphalt or residues from the distillation of crude oil petroleum or coal which consist mainly of hydrocarbons, and include, but are not limited to, asphalt, tar, pitch, and asphalt tile that are soluble in carbon disulfide.~~

(4336) MULTIPURPOSE CONSTRUCTION ADHESIVE is any adhesive to be used for the installation or repair of various construction materials, including but not limited to: drywall, subfloor, panel, fiberglass reinforced plastic (FRP), ceiling tile, and acoustical tile.

~~(44) — NONMEMBRANE ROOF ADHESIVE is any adhesive to be used for the installation or repair of nonmembrane roofs. — This category includes plastic or asphalt roof cement, asphalt roof coatings, and cold application cement.~~

~~(45) — NONMEMBRANE ROOF SEALANT is any sealant to be used for installation or repair of nonmembrane roofs. — This category includes plastic or asphalt roof cement, asphalt roof coatings, and cold application cement.~~

~~(46) — ORTHOTICS AND PROSTHETICS are medical devices designed and fabricated to address human neuromuscular and structural skeletal problems in order to activate, supplement, or replace weakened, atrophied, or missing limbs.~~

(4737) OUTDOOR CARPET FLOOR COVERING ADHESIVE is an adhesive used during the installation of carpet floor covering that is not in an enclosure and or is exposed to ambient weather conditions during normal use.

(4838) PANEL ADHESIVE is an adhesive used for the installation of plywood, pre-decorated hardboard (or tileboard), fiberglass reinforced plastic, and similar pre-decorated or non-decorated panels to studs or solid surfaces.

(4939) PERCENT VOC BY WEIGHT is the ratio of the weight of the VOC to the weight of the material, expressed as a percentage of VOC by weight. The percent VOC by weight can be calculated as follows:

$$\% \text{ VOC weight} = \frac{W_v}{W} \times 100$$

Where:  $W_v$  = weight of the VOCs, in grams  
 $W$  = weight of material, in grams

- (~~5040~~) PERSON is ~~any individual, firm, association, organization, partnership, business, trust, corporation, company, contractor, supplier, installer, user or owner, or any state or local governmental agency or public district or any other officer or employee thereof. Person also means the United States or its agencies to the extent authorized by Federal laws defined in Rule 102.~~
- (~~5141~~) PLASTIC CEMENT WELDING is the use of adhesives made of resins and solvents which are used to dissolve the surfaces of plastic, except ABS, CPVC, and PVC plastic, to form a bond between mating surfaces.
- (~~5242~~) PLASTIC FOAM is a foam constructed of plastics.
- (~~5343~~) PLASTICS are synthetic materials chemically formed by the polymerization of organic (carbon-based) substances. Plastics are usually compounded with modifiers, extenders, and/or reinforcers. They are capable of being molded, extruded, cast into various shapes and films or drawn into filaments and are used to produce pipe, solid sheet, film, or bulk products.
- (~~54~~) ~~POLYCARBONATE is a thermoplastic resin derived from bisphenol A and phosgene, a linear polyester of carbonic acid, dihydroxy compound and any carbonate diester, or by ester interchange.~~
- (~~55~~) ~~POLYETHYLENE TEREPHALATE (PET, PETE) is a thermoplastic polyester formed from ethylene glycol by direct esterification or by catalyzed ester exchange between ethylene glycol and dimethyl terephthalate.~~
- (~~56~~) ~~POLYETHYLENE TEREPHALATE GLYCOL (PETG) is a glycol modified polyethylene terephthalate.~~
- (~~57~~) ~~POLYURETHANE FOAMS are plastic foams, as defined in "Whittington's Dictionary of Plastics," page 329, and may be either rigid or flexible.~~
- (~~5844~~) POLYVINYL CHLORIDE (PVC) plastic is a polymer of the chlorinated vinyl monomer that contains 57 percent chlorine.

(5945) POROUS MATERIAL is a substance which has tiny openings, often microscopic, in which fluids may be absorbed or discharged. Such materials include, but are not limited to, wood, fabric, paper, corrugated paperboard, and plastic foam.

~~(60) — PRIMER is a material applied to a substrate surface to improve adhesion of subsequently applied adhesive.~~

~~(61) — PROPELLANT is a fluid under pressure which expels the contents of a container when a valve is opened.~~

(6246) REACTIVE DILUENT is a liquid which is a VOC during application and one in which, through chemical and/or physical reactions, such as polymerization, 20 percent or more of the VOC becomes an integral part of ~~a finished material~~ the adhesive product.

(47) REGULATED PRODUCT is an adhesive, adhesive primer, caulk, sealant or sealant primer subject to this rule.

(6348) ROADWAY SEALANT is any sealant to be applied to ~~public~~ streets, highways, and other surfaces, including but not limited to curbs, berms, driveways, and parking lots.

(6449) ROLL COATER is a series of mechanical rollers that form a thin ~~coating or adhesive~~ film on the surface roller, which is applied to a substrate by moving the substrate underneath the roller.

(50) RUBBER is any natural or manmade rubber-like substrate, including but not limited to, styrene-butadiene, polychloroprene (neoprene), butyl, nitrile, chlorosulfonated polyethylene and ethylene propylene diene terpolymer.

(6551) RUBBER FLOORING ADHESIVE is an adhesive that is used for the installation of flooring material in which both the back and the top surface are made of synthetic rubber, and which may be in sheet or tile form.

(52) RUBBER VULCANIZATION ADHESIVE is a reactive adhesive used for rubber-to-substrate bonding achieved during vulcanization of the rubber elastomer at temperatures greater than 250°F. Vulcanized rubber adhesive does not include bonding previously vulcanized rubber.

~~(66) — RUBBER FOAM is a foam constructed of natural or synthetic rubber.~~

(6753) SEALANT is any material with adhesive properties that is formulated primarily to fill, seal, or waterproof gaps or joints between two surfaces.

Sealants include ~~sealant primers and~~ caulks. Sealant does not include any sealer that is applied as a continuous coating.

- (~~68~~54) SEALANT PRIMER is any film-forming product applied to a substrate, prior to the application of a sealant, to enhance the bonding surface.
- ~~(69) SHOE REPAIR, LUGGAGE AND HANDBAG ADHESIVE is an adhesive used to repair worn, torn or otherwise damaged uppers, soles, and heels of shoes, or for making repairs to luggage and handbags.~~
- ~~(70) SHEET APPLIED RUBBER LINING OPERATION is the hand application of sheet rubber lining to metal or plastic substrates in order to protect the underlying substrate from corrosion or abrasion. These operations also include laminating sheet rubber to fabric.~~
- (55) SHOE REPAIR, LUGGAGE AND HANDBAG ADHESIVE is an adhesive used to repair worn, torn or otherwise damaged uppers, soles, and heels of shoes, or for making repairs to luggage and handbags.
- (~~71~~56) SINGLE-PLY ROOF MEMBRANE ADHESIVE is any adhesive sealant to be used for the installation or repair of single-ply roof membrane. Installation includes, but is not limited to attaching the edge of the membrane to the edge of the roof and applying flashings to vents, pipes, or ducts that protrude through the membrane.
- ~~(72~~57) SINGLE-PLY ROOF MEMBRANE SEALANT is any sealant ~~to be~~ used for the installation or repair of single-ply roof membrane ~~to the edge of the roof and applying flashings to vents, pipes, or ducts that protrude through the membrane.~~
- (~~73~~58) SOLVENT WELDING is the softening of the surfaces of two substrates by wetting them with solvents and/or adhesives, and joining them together through a chemical and/or physical reaction(s) to form a fused union.
- ~~(74) SPACE VEHICLE is a vehicle designed to travel beyond Earth's atmosphere.~~
- (~~75~~59) SPECIAL PURPOSE CONTACT ADHESIVE is a contact adhesive that is used to bond all of the following substrates to any surface: melamine covered board, metal, unsupported vinyl, Teflon, ultra-high molecular weight polyethylene, rubber and wood veneer 1/16 inch or less in thickness.
- (~~76~~60) STRUCTURAL GLAZING ADHESIVE is any adhesive to be used to adhere glass, ceramic, metal, stone, or composite panels to exterior building frames.

- (7761) STRUCTURAL WOOD MEMBER ADHESIVE is an adhesive used for the construction of any load bearing joints in wooden joists, trusses, or beams.
- (7862) SUBFLOOR ADHESIVE is an adhesive used for the installation of subflooring material over floor joists.
- (7963) THIN METAL LAMINATING is a process of bonding multiple layers of metal to metal or metal to plastic in the production of electronic or magnetic components in which the thickness of the bond line(s) is less than 0.25 mil.
- (8064) TIRE REPAIR is the expanding of a hole, tear, fissure, or blemish in a tire casing by grinding or gouging, applying adhesive, and filling the hole or crevice with rubber.
- (8165) TIRE ~~RE~~TREAD ADHESIVE is any adhesive to be applied to the back of precured tread rubber and to the casing and cushion rubber, or to be used to seal buffed tire casings to prevent oxidation while the tire is being prepared for a new tread.
- (8266) TOP AND TRIM ADHESIVE is an adhesive used during the installation of automotive and marine trim, including, but not limited to, headliners, vinyl tops, vinyl trim, sunroofs, dash covering, door covering, floor covering, panel covering and upholstery.
- (8367) TRAFFIC MARKING TAPE is preformed reflective to be applied to public streets, highways, and other surfaces, including but not limited to curbs, berms, driveways, and parking lots.
- (8468) TRAFFIC MARKING TAPE ADHESIVE PRIMER is any adhesive primer to be applied to surfaces prior to installation of traffic marking tape.
- (8569) TRANSFER EFFICIENCY is the ratio of the weight or volume of the regulated coating-product solids adhering to an object to the total weight or volume, respectively, of the regulated coating-product solids used in the application process, expressed as a percentage.
- (8670) VCT means ~~vinyl-Vinyl composition~~ Composition tile-Tile and is a material made from thermoplastic resins, fillers and pigments.
- ~~(87) — VISCOSITY is the internal friction of a liquid that makes it resistant to flow.~~
- (8871) VOLATILE ORGANIC COMPOUND (VOC) is as defined in Rule 102 - Definition of Terms. For the purpose of this rule, tertiary butyl acetate

(TBAC) and dimethyl carbonate DMC) shall be considered exempt as a VOC only for purposes of VOC emission limitations and VOC content requirements when used in roofing regulated products. TBAC shall be subject to all recordkeeping, emission reporting, photochemical dispersion modeling, and inventory requirements which apply to VOCs.

(72) WATERPROOF RESORCINOL GLUE is a two-part, resorcinol-resin-based adhesive used in applications where the bond line must be resistant to conditions of continuous immersion in fresh or salt water.

(8973) WOOD FLOORING ADHESIVE is an adhesive used to install a wood floor surface, which may be in the form of parquet tiles, wood planks, or strip-wood.

~~(90) WOOD PARQUET FLOORING is wood flooring in tile form constructed of smaller pieces of wood which are joined together in a pattern by the maker to form the tile.~~

~~(91) WOOD PLANK FLOORING is solid or laminated wood in plank form.~~

(c) Requirements

~~(1) Unless otherwise specified in paragraph (c)(2), a person shall not apply any adhesives, adhesive bonding primers, adhesive primers, or any other primer, which have a VOC content in excess of 250 g/L less water and less exempt compounds.~~

(21) A person shall not apply adhesives, ~~adhesive bonding primers,~~ adhesive primers, caulks, sealants, or sealant primers, ~~or any other primer,~~ subject to the provisions of this rule, which have a contain VOC ~~content~~ in excess of the limits specified in Table 1 below:

**VOC Limit\*, Less Water and Less Exempt Compounds in Grams per Liter**

ARCHITECTURAL APPLICATIONS	CURRENT VOC LIMIT
Indoor Carpet Adhesives	50
Carpet Pad Adhesives	50
Outdoor Carpet Adhesives	150
Wood Flooring Adhesive	100
Rubber Floor Adhesives	60
Subfloor Adhesives	50
Ceramic Tile Adhesives	65
VCT and Asphalt Tile Adhesives	50

Dry Wall and Panel Adhesives	50
<b>ARCHITECTURAL APPLICATIONS</b>	<b>CURRENT VOC LIMIT</b>
Cove Base Adhesives	50
Multipurpose Construction Adhesives	70
Structural Glazing Adhesives	100
Single-Ply Roof Membrane Adhesives	250

Specialty Applications	VOC LIMITS AND EFFECTIVE DATES**			
	Current VOC Limit	1-1-05	7-1-05	1-1-07
PVC Welding	510			
CPVC Welding	490			
ABS Welding	400		<b>325</b>	
Plastic Cement Welding	350	250		
Adhesive Primer for Plastic	650		<b>550</b>	
Computer Diskette Manufacturing	350			
Contact Adhesive	80			
Special Purpose Contact Adhesive	250			
Tire Retread	100			
Adhesive Primer for Traffic Marking Tape	150			
Structural Wood Member Adhesive	140			
Sheet Applied Rubber Lining Operations	850			
Top and Trim Adhesive	540			<b>250</b>

\*\* The specified limits remain in effect unless revised limits are listed in subsequent columns. For adhesives, adhesive bonding primers, or any other primer not regulated by the above two tables and applied to the following substrates, the following limits shall apply:

Substrate Specific Applications	Current VOC Limit
Metal to Metal	30
Plastic Foams	50
Porous Material (except wood)	50
Wood	30
Fiberglass	80

If an adhesive is used to bond dissimilar substrates together the adhesive with the highest VOC content shall be allowed.

<b>Sealants</b>	<b>Current VOC Limit</b>
Architectural	250
Marine Deck	760
Nonmembrane Roof	300
Roadway	250
Single Ply Roof Membrane	450
Other	420

<b>Sealant Primers</b>	<b>Current VOC Limit</b>
Architectural Non-Porous	250
Porous	775
Modified Bituminous	500
Marine Deck	760
Other	750

\*—— For low solid adhesives or sealants the VOC limit is expressed in grams per liter of material as determined in paragraph (b)(32); for all other adhesives and sealants, VOC limits are expressed as grams of VOC per liter of adhesive or sealant less water and less exempt compounds as determined in paragraph (b)(31).

**Table 1 – Regulated Product Categories and VOC Limits**

<b>Category</b>	<b>VOC Limits (g/L)*</b>				
	<b>Current</b>	<b>1/1/2015</b>	<b>1/1/2016</b>	<b>1/1/2017</b>	<b>1/1/2019</b>
<b><u>Adhesives</u></b>					
<u>ABS Welding</u>	<u>325</u>				
<u>Architectural Applications</u>					
<u>Carpet Pad Adhesive</u>	<u>50</u>		<u>20</u>		
<u>Ceramic Tile Adhesive</u>	<u>65</u>		<u>20</u>		
<u>Cove Base Adhesive</u>	<u>50</u>		<u>20</u>		
<u>Dry Wall and Panel Adhesive</u>	<u>50</u>		<u>20</u>		
<u>Indoor Flooring Adhesive</u>	<u>50</u>		<u>20</u>		
<u>Multipurpose Construction Adhesive</u>	<u>70</u>		<u>20</u>		
<u>Other Roof Adhesive</u>	<u>250</u>		<u>100</u>		
<u>Outdoor Floor Covering Adhesive</u>	<u>150</u>		<u>20</u>		
<u>Rubber Floor Adhesive</u>	<u>60</u>		<u>20</u>		
<u>Single Ply Roof Membrane Adhesive</u>	<u>250</u>		<u>100</u>		
<u>Structural Glazing Adhesive</u>	<u>100</u>		<u>40</u>		
<u>Structural Wood Member</u>	<u>140</u>		<u>20</u>		

<u>Adhesive</u>					
<u>Subfloor Adhesive</u>	<u>50</u>		<u>20</u>		
<u>VCT and Asphalt Tile Adhesive</u>	<u>50</u>		<u>20</u>		
<u>Wood Flooring Adhesive</u>	<u>100</u>		<u>20</u>		
<u>Computer Diskette Manufacturing</u>	<u>350</u>				
<u>Contact Adhesive</u>	<u>80</u>				
<u>CPVC Welding</u>	<u>490</u>				
<u>Plastic Cement Welding</u>	<u>250</u>				
<u>PVC Welding</u>	<u>510</u>				
<u>Rubber Vulcanization Adhesive</u>	<u>850</u>				<u>250</u>
<u>Special Purpose Contact Adhesive</u>	<u>250</u>				
<u>Thin Metal Laminating</u>	<u>780</u>				
<u>Tire Retread</u>	<u>100</u>				
<u>Top and Trim Adhesive</u>	<u>250</u>		<u>540</u>		
<u>Waterproof Resorcinol Glue</u>			<u>170</u>		
<u>All Other Adhesives</u>	<u>250</u>				
<b><u>Substrate Specific Adhesive Applications</u></b>					
<u>Metal</u>	<u>30</u>				
<u>Plastic Foams</u>	<u>50</u>		<u>20</u>		
<u>Porous Material (except wood)</u>	<u>50</u>				
<u>Wood</u>	<u>30</u>				
<u>Fiberglass</u>	<u>80</u>				
<u>Reinforced Plastic Composite</u>			<u>200</u>		
<u>Other Substrates</u>	<u>250</u>				
<b><u>Sealants and Caulks</u></b>					
<u>Architectural</u>					
<u>Foam Sealant</u>		<u>200</u>		<u>20</u>	
<u>Marine Deck</u>	<u>760</u>				
<u>All Other Roof</u>	<u>300</u>		<u>50</u>		
<u>Single-Ply Roof Membrane</u>	<u>450</u>		<u>100</u>		
<u>All Other Architectural</u>	<u>250</u>		<u>50</u>		
<u>Roadway</u>	<u>250</u>		<u>50</u>		
<u>All Other Sealants</u>	<u>420</u>				
<b><u>Adhesive Primers</u></b>					
<u>Adhesive Primer for Plastic</u>	<u>550</u>				
<u>Adhesive Primer for Traffic</u>	<u>150</u>				

<u>Marking Tape</u>					
<u>Automotive Glass</u>	<u>700</u>				
<u>All Other Adhesive Primers</u>	<u>250</u>				
<b><u>Sealant Primers</u></b>					
<u>Architectural</u>					
<u>Marine Deck</u>	<u>760</u>				
<u>Non Porous</u>	<u>250</u>				
<u>Porous</u>	<u>775</u>		<u>250</u>		
<u>All Other Sealant Primers</u>	<u>750</u>				

\* ~~For low solid adhesives or sealants the VOC limit is expressed in grams per liter of material as determined in paragraph (b)(32); for all other adhesives and sealants, VOC limits are expressed as grams of VOC per liter of adhesive or sealant regulated products less water and less exempt compounds as determined in paragraph (b)(3+25) except for low-solid regulated products where the VOC limit is expressed in grams per liter of material as determined in paragraph (b)(26).~~

~~(32) A person shall dispose of regulated products and Containers used to dispose of VOC-laden cloth or paper used in stripping cured adhesives or sealants regulated product applications shall be in closed containers except when depositing or removing the contents of VOC laden cloth or paper from the container.~~

~~(4) Solvent Cleaning Operations; storage and disposal of VOC containing materials shall be conducted in accordance with the provisions of Rule 1171 Solvent Cleaning Operations.~~

(3) Solvent cleaning of application equipment, parts, products, tools, machinery, equipment, general work areas, and the storage and disposal of VOC-containing materials used in cleaning operations shall be carried out pursuant to Rule 1171 - Solvent Cleaning Operations.

(54) Transfer Efficiency  
 A person shall ~~not only~~ apply VOC-containing regulated adhesives or sealants product unless if the adhesive or sealant is applied with properly operating equipment in accordance with operating procedures specified by either the equipment manufacturer or the Executive Officer. ~~Application of adhesives or sealants shall be accomplished only and~~ by the use of one of the following methods:

- (A) Electrostatic application; or
- (B) Flow coat; or
- (C) Dip coat; or

- (D) Roll coater; or
- (E) High-Volume, Low-Pressure (HVLP) spray; or
- (F) Hand application methods; or
- (G) Such other regulated adhesive or sealant product application methods as are demonstrated to the Executive Officer to be capable of achieving at least 65 percent transfer efficiency a transfer efficiency equivalent or better to the method listed in subparagraph (c)(4)(E) and for which prior written approval of the Executive Officer has been obtained; ~~or.~~

~~(H) For adhesives and sealants with a viscosity of 200 centipoise or greater, as applied, airless spray, air assisted airless, and air atomized spray may also be used.~~

- (65) A person may comply with the provisions of paragraphs (c)(1), ~~(e)(2), or (c)(54)~~, or all three both, by using approved air pollution control equipment, provided: ~~that the VOC emissions from such operations and/or materials are reduced by at least 80 percent overall, by weight.~~

~~(A) The control device reduces VOC emissions from an emission collection system by at least 95 percent by weight or the output of the air pollution control device is no more than 5 PPM VOC by volume calculated as carbon with no dilution; and~~

~~(B) The owner/operator demonstrates that the emission collection system collects at least 90 percent by weight of the VOC emissions generated by the sources of VOC emissions.~~

- ~~(76)~~ A person may comply with the provisions of paragraph (c)(1) ~~and paragraph (e)(2)~~ by means of an Alternative Emission Control Plan pursuant to Rule 108.

(87) Regulated Product Categorization

If anywhere on the regulated product container ~~of any adhesive or sealant~~, on any sticker or label affixed thereto, or in any sales or advertising literature, any representation is made that the ~~adhesive or sealant~~ regulated product may be used as, or is suitable for use as, a regulated product for which a lower VOC standard is specified in Table 1 or for any another source specific rule application, for which there is a lower VOC standard, then the lowest VOC standard shall apply. This provision does not apply to substrate specific adhesive applications.

(98) The VOC content of ~~regulated adhesives and sealants~~ products that are applied with the use of refillable pressurized containers are subject to the VOC limits of this rule.

(9) Regulated products manufactured after January 1, 2016, shall be labeled as follows:

(A) Each container shall display the maximum VOC content of the regulated product as applied. VOC content shall be displayed as grams of VOC per liter, excluding water and exempt compounds, or grams of VOC per liter of material for low-solids products.

(B) Each container shall display a statement of the manufacturer's recommendations regarding thinning, reducing, or mixing with any other VOC containing material. Mixing recommendations shall specify a ratio which results in a compliant, as applied, product.

(C) Each container shall display the date of manufacture of the contents.

(10) A person shall not store regulated products which contain VOC in excess of the limits specified in paragraph (c)(1). This provision does not include products shipped, supplied or sold to persons for use outside the District or to persons using approved air pollution control equipment pursuant to paragraph (c)(5).

(11) Containers used for mixing or storing VOC-containing regulated products shall be kept closed at all times except when in use.

(d) Recordkeeping Requirements

Notwithstanding provisions of subdivision (i), records of regulated product usage shall be maintained pursuant to Rule 109.

(e) Methods of Analysis

(1) The VOC content of ~~cleaning materials and regulated adhesives or sealants~~ products shall be determined by using USEPA Reference Method 24 (Determination of Volatile matter Content, Water Content, Density Volume Solids, and Weight Solids of Surface Coating, Code of Federal Regulations Title 40, Appendix A, utilizing Procedure B of ASTM Method D2369), ~~or the~~ SCAQMD Method 304, or SCAQMD Method 313.

(2) The exempt compound's content shall be determined by Methods 302 and 303 in the South Coast Air Quality Management District's (SCAQMD)

"Laboratory Methods of Analysis for Enforcement Samples" or ASTM Method D4457-85.

- (3) The VOC content of PVC, CPVC, and ABS pipe cements, adhesive primer for plastic shall be determined by Method 316A in the South Coast Air Quality Management District's (SCAQMD) "Laboratory Methods of Analysis for Enforcement Samples."

~~(4)~~ ~~(4)~~—The VOC content of cyanoacrylate adhesives shall be determined by Method 316B in the South Coast Air Quality Management District's (SCAQMD) "—Laboratory Methods of Analysis for Enforcement Samples."

(5) To determine if a diluent is reactive, the percent of the reactive organic compound that becomes an integral part of the finished materials shall be determined using Appendix A to Subpart P of 40 CFR Part 63—Determination of Weight Volatile Matter Content and Weight Solids Content of Reactive Adhesives

(f) Test Methods

- (1) The efficiency of the control device and the VOC content measured and calculated as carbon in the control device exhaust gases shall be determined by USEPA'S Test Method 18, or Air Resources Board (ARB) Method 422 for the determination of emissions of Exempt Compounds and USEPA's Test Methods 25, 25A, SCAQMD's Method 25.1, or SCAQMD Test Method 25.3. (Determination of Total Gaseous Non-Methane Organic Emissions as Carbon) for the determination of total organic compound emissions. Emissions determined to exceed any limits established by this rule through the use of any of the above-referenced test methods shall constitute a violation of the rule.

(2) Viscosity will be determined by ASTM D 1084-~~8808~~ Standard Test Methods for Viscosity of Adhesives.

- (3) The following classes of compounds: cyclic, branched, or linear, completely fluorinated alkanes; cyclic, branched, or linear, completely fluorinated ethers with no unsaturations; cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations; and sulfur-containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine, will be analyzed as exempt compounds for compliance with subdivision (c), only at such time as manufacturers

specify which individual compounds are used in the coating formulations and identify the test methods, which, prior to such analysis, have been approved by the USEPA and the SCAQMD, that can be used to quantify the amounts of each exempt compound.

~~(g) — Prohibition of Specifications~~

~~(1) — A person shall not solicit or require any other person to use, in the District, any adhesives or sealants or combination of adhesives or sealants in violation of the requirements of this rule.~~

~~(2) — The requirements of this paragraph shall apply to all written or oral agreements executed or entered into after July 1, 1989.~~

(g) Reporting

(1) For each calendar year (January 1 through December 31) beginning in 2014, a manufacturer or supplier of regulated products shall submit to the District by April 1 of the following calendar year, an annual report of product sales within the District. The report shall include the following information:

(A) Product manufacturer (as listed on the label);

(B) Product name and code;

(C) Applicable Rule 1168 category or categories;

(D) VOC content less water and exempt solvents as determined by calculation based on product formulation or laboratory analysis;

(E) VOC content of material as determined by calculation based on product formulation or laboratory analysis; and

(F) Volume sold for use within the District.

(2) For each calendar year (January 1 through December 31) beginning in 2014, a manufacturer or supplier of regulated products sold to a user under the provisions of paragraph (j)(6) shall submit to the District by April 1 of the following calendar year, an annual report of regulated product sales under the provisions of paragraph (j)(6) within the District. The report shall include the following information:

(A) Product manufacturer (as listed on the label);

(B) Product name and code;

(C) VOC content less water and exempt solvents;

(D) VOC content of material; and

(E) Company name sold to, address and volume sold for each product sold.

(3) Manufacturers or suppliers of regulated products shall maintain records to verify data used to determine VOC content in preparing their annual quantity and emissions report. The records shall be maintained for five (5) years and made available upon request by the Executive Officer. Such records shall include:

(A) Laboratory reports; or

(B) VOC content calculations.

(h) Prohibition of Sales and Use

(1) ~~On and after September 1, 2001, except~~ Except as provided in subdivision (j), paragraphs (c)(~~65~~) and (c)(~~76~~), no person shall use, supply, sell, or offer for sale ~~an adhesive, sealant, or adhesive or sealant primer for use~~ regulated product in the District that at the time of sale exceeds the applicable VOC limits specified in paragraphs (c)(1) ~~and (e)(2)~~.

(2) ~~On and after January 1, 2004~~ Except as provided in subdivision (j), no person shall use, supply, sell, or offer for sale ~~an adhesive, sealant, or adhesive or sealant primer for use~~ regulated product in the District that contains chloroform, ethylene dichloride, methylene chloride, perchloroethylene, and trichloroethylene.

(3) On and after January 1, 2016, except as provided in subdivision (j), no person shall use, supply, sell, or offer for sale a regulated product in the District that contains Group II exempt compounds listed in Rule 102 in quantities greater than 0.1 percent by weight. This provision does not apply to cyclic, branched, or linear, completely methylated siloxanes (VMS).

(~~34~~) The prohibition of sales and use as specified in paragraphs (h)(1), ~~and~~ (h)(2) ~~and (h)(3)~~ shall not apply to the following:

(A) Regulated products shipped, supplied or sold to persons for use outside the District;

(B) Any manufacturer or supplier of regulated products provided the product was sold to an independent distributor that was informed in writing by the manufacturer or supplier that the regulated product is not to be used in the South Coast Air Quality Management District. Manufacturers utilizing this provision shall maintain

notification letters for five (5) years, which shall be made available to the Executive Officer or designee upon request. the following:

~~(A) — Adhesives and sealants shipped, supplied or sold to persons for use outside the District;~~

~~(B) — Any manufacturer of adhesives or sealants, provided that the manufacturer has complied with the labeling requirements of Rule 443.1 — Labeling of Materials Containing Organic Solvents, and the product is not sold directly to a user located in the District, or the product was sold to an independent distributor or a sales outlet located in the District that is not a subsidiary of, or under the control of the manufacturer, and was informed in writing by the manufacturer about the compliance status of the product with Rule 1168;~~

~~(C) — Adhesives and Sealants that contain less than one percent by weight of methylene chloride; or~~

~~(D) — Solvent welding formulations containing methylene chloride used to bond hard acrylic, polycarbonate, and polyethylene terephthalate glycol plastic fabrications, provided:~~

~~(i) — The concentration of methylene chloride in any solvent welding formulation does not exceed 60 percent by weight; and~~

~~(ii) — The purchase of all solvents welding products does not exceed 20 gallons per calendar year at a single facility, as demonstrated by purchase records and invoices of methylene chloride containing solvent welding formulations. Such records shall be made available to the Executive Officer or his representative upon request.~~

(5) Any regulated product that is manufactured prior to the effective date of the applicable limit specified in paragraph (c)(1), and that has a VOC content above that limit (but not above the limit in effect on the date of manufacture), may be sold, supplied, offered for sale for up to six months after the specified effective date.

(6) Any regulated product that is manufactured prior to the effective date of the applicable limit specified in paragraph (c)(1), and that has a VOC content above that limit (but not above the limit in effect on the date of manufacture), may be applied for up to 12 months after the specified effective date.

(i) Rule 442 Applicability

Any ~~regulated adhesive, sealant, adhesive or sealant operation, or person, product~~ which is exempt from all or a portion of this rule shall comply with the provisions of Rule 442.

(j) Exemptions

(1) The provisions of paragraph (c)(1) ~~and paragraph (e)(2)~~ shall not apply to the following:

(A) Adhesives used in tire repair; or

(B) Adhesives and/or adhesive application processes in compliance with Rules 1104, 1106, 1128, 1130 and 1130.1.

(2) The provisions of this rule shall not apply to ~~aerospace components adhesives, adhesive primers, caulks, sealants, or sealant primers and associated application processes~~ that are subject to Rule 1124.

(3) ~~The provisions of this rule, except subdivisions (g) and (h), shall not apply to the following:~~

~~(A) Regulated products with a VOC content no more than 20 grams per liter, less water and less exempt compounds; or~~

~~(B) Regulated products sold in quantities of two ounces or less, excluding packaging. The provisions of paragraph (e)(5) and subdivision (d) shall not be applied to the application of adhesives or sealants that contain less than 20 g/L of VOC per liter of adhesives, less water and less exempt compounds.~~

~~(4) The provisions of this rule shall not apply to adhesive tape or paper.~~

~~(4) The provisions of this rule shall not apply to any facility that uses less than one pint of total adhesives and sealants in any one day so long as the products were purchased prior to September 15, 2000.~~

~~(5)~~ The provisions of subdivision (c) shall not apply to research and development programs and quality assurance labs. Records shall be maintained in accordance with the provisions of subdivision (d) of this rule, provided that:

~~(A) A record is kept of:~~

~~(i) The date when the adhesives and sealants are used, and the type of application(s); and~~

- ~~(ii) — The amount of adhesives and sealants used and the VOC content of such adhesives and sealants; and~~
- ~~(iii) — The amount of solvents used and VOC content of such solvents; and~~
- ~~(iv) — The manufacturer/suppliers identification and type of material; and~~
- ~~(B) — Such records shall be retained in accordance with the provisions of subdivision (e) of this rule.~~
- (6) The provisions of paragraph (c)(1) ~~and paragraph (e)(2)~~ shall not apply to a facility that demonstrates that the total volume of non-compliant ~~adhesives, adhesive primers, adhesive bonding primers, sealants, and sealant primers~~ products is less than 55 gallons per facility per rolling 12-month period. ~~On and after September 1, 2001, a~~ A facility may not use this paragraph to exclude non-compliant adhesives used in architectural applications, contact adhesives, special purpose contact adhesives, and adhesives used on porous substrates. Effective January 1, 2016, a facility may not use this paragraph to exclude non-compliant rubber vulcanization adhesives and top and trim adhesives.
- (7) The provisions of this rule, except paragraphs (h)(2) ~~and (h)(3)~~, shall not apply to adhesives used to glue flowers to parade floats.
- (8) The provisions of subdivision (c) shall not apply to solvent welding operations used in the manufacturing of medical devices.
- (9) ~~The provisions of this rule shall not apply to aerosol~~ Non-compliant aerosol regulated adhesives and primers dispensed from aerosol spray cans ~~products shall not be subject to the provisions of paragraph (c)(1) provided that 16 ounces or less are used per day, per facility, determined on a rolling monthly average. The use of such products shall comply with all applicable CARB regulations.~~
- ~~(10) — The provisions of paragraph (e)(1) and paragraph (e)(2) shall not apply to any adhesive used exclusively for thin metal laminating operations, provided that the adhesive contains less than 780 grams of VOC per liter of adhesive, less water and less exempt compounds, as applied, and the facility uses a total of three gallons per day or less of these adhesives.~~
- (11) ~~10~~ The provisions of this rule, except paragraphs (c)(10), (h)(2), (h)(3) and subdivision (d), shall not apply to light energy curable adhesives and

sealants with a VOC content no more than 50 grams per liter, less water and less exempt compounds.

~~(12) — The provisions of this rule, except paragraph (h)(2), shall not apply to the use of cyanoacrylate adhesives.~~

~~(1311) Regulated p~~The provisions of this rule shall not apply to adhesives and sealants~~products which weigh one pound or less, or consist of 16 fluid ounces or less, excluding packaging, and are subject to VOC content limits in~~ to the California Air Resources Board ~~consumer~~ Consumer products ~~Products regulation~~ Regulation found in Title 17 of the California Code of Regulations, beginning at Section 94507 are exempt from the following:

(A) Paragraph (c)(9) and subdivisions (g) and (h);

(B) The provisions of this rule provided they are not used in manufacturing operations.

~~(14) — Until October 1, 2003, the provisions of paragraph (c)(1) and paragraph (c)(2) shall not apply to solvent welding of flexible ductwork, at which time the VOC limit shall be 250 grams per liter, less water and less exempt compounds.~~

~~(15) — A person may sell or apply a non-complying VOC containing or methylene chloride containing product for one year after the applicable effective date in paragraph (c)(2) for VOC containing adhesives and sealants, and for one year after the applicable effective date of paragraph (h)(2) or subparagraph (h)(3)(D) for methylene chloride containing adhesives and sealants, provided:~~

~~(A) — The product complies with the previous applicable VOC limit,~~

~~(B) — The product was manufactured prior to the effective date, and~~

~~(C) — The date of manufacture or a code indicating that date is clearly displayed on the product.~~

~~(1612) The provisions of this rule, except paragraphs (h)(2) and (h)(3), shall not apply to adhesives used to fabricate orthotics and prosthetics under a medical doctor's prescription.~~

~~(1713) The provisions of this rule, except paragraph (h)(2) and (h)(3), shall not apply to shoe repair, luggage and handbag adhesives.~~

(14) The provisions of paragraph (c)(4) shall not apply to regulated products with a viscosity of 200 centipoise or greater.